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ABSTRACT

This project developed as an effort to investigate how the school could become more actively involved in educational innovation. This final report highlights work conducted over the period 1972-75 in the nineteen Organization for Economic Cooperation and Innovation member countries that took part in the project. The first two chapters summarize the first phase of activity which defined the concept of the project. Chapters three through seven are syntheses by the reporters for the five subactivities selected for indepth analysis in the second phase. These are based on the findings of a number of national country studies prepared for the working conferences held on each subject area and original papers prepared by them. The activities were: (1) incentive systems for teachers; (2) creativity and the internal organization of the school; (3) the role of the inspectorate; (4) professional support and the creativity of the school; and (5) the allocation of financial resources and public accountability. The final chapter draws together the material presented in these papers and formulates a number of conclusions about the environment conducive to creative problem-solving within schools. (JD)

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Centre for Educational Research and Innovation (CERI)

ED164528

CREATIVITY OF THE SCHOOL

*Conclusions of a Programme
of Enquiry*

U.S. DEPARTMENT OF HEALTH,
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Conclusions d'une enquête

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PREFACE

The term "creativity of the school" challenges some widely held assumptions about the essentially conservative character of schooling. Numerous critics maintain that the school merely reflects and consolidates the existing social and cultural order despite the many changes that have been taking place; for example, the reorganisation and democratisation of secondary education, curriculum reform, the development of community-controlled schools and the extension of early childhood and recurrent education.

Whether or not the school is a creative institution depends not only upon its organisation, but also upon the aims and purposes for which schools exist. If one accepts a limited role for the school, viewing it as a culturally-conserving agency with narrow, precisely defined functions, "creativity" could be interpreted as "buttressing" the existing system. Viewed in this way, talk of a culturally or socially creative task for schooling is largely irrelevant. Creativity of the school then becomes a matter of supporting structures and enabling mechanisms; a kind of push-pull theory of innovation, whereby institutions and the processes they sustain are kept intact, more or less stable and adaptive to outside forces and pressures.

By far the largest share of public expenditure on education is in fact devoted to sustaining schools in their present form, reinforcing them in the roles they do carry out, and in providing an intricate bureaucratic network of structures from national examination systems to rules governing school maintenance. With the present rate of growth in educational budgets falling or levelling off, it is natural that educational policy makers are primarily concerned with finding ways to economise in the very widest sense of the word. "Creativity" and educational innovation become precarious values within the context of restricted budgets and increasing demands for accountability. As salaries and operating costs continue to rise, it is increasingly difficult to generate additional resources and support for schools when they would appear to play such a minor role in promoting social, economic or even educational change.

Perhaps, however, one could look to the schools for some of the culturally creative and socially energising ideas that our rapidly changing, unstable, problem-saturated societies need. The productivity of the economy and the capriciousness of international affairs more

often feature in the headlines than the quality of education, but if we are to take seriously the challenge and responsibilities schools have to develop the potential of every individual in his own interest and in the interests of society, we shall have to undertake seriously to redefine the aims and purposes of schooling, and not merely those structures that support or encourage innovation.

This re-definition is not a matter of simply drawing up a few prescriptions for policy in a Ministry of Education. Rather the school itself has a vital role to play in defining its part in the analysis, conceptualisation and construction of an educative society which utilises the diversity and talents of all its members. Thus, the "creativity of the school" is in part the contribution the school can make to the development of culture and society, and the on-going analysis and definition of its own involvement in that culture. Given this evolving concept of the nature of schooling, it is certainly necessary and prudent in terms of politics, finance and administration to consider the apparatus necessary to sustain schools in whatever roles are assigned to them by the relevant authorities.

CERI's project 'Creativity of the School' took three years examining this whole subject, progress being reported already in three publications. This present volume marks the final stage of the work, presenting the conclusions of specialist groups appointed to look into five sources of support that have, perhaps, most to offer the schools in this aspect of their task. This is not to mean, though, that we should lose sight of the kind of society in which the school might play a new role, nor of its contribution to the creation of that new society. In the words of John Dewey, "...it is enough to get students to think, for if we once start thinking no one can guarantee where we shall come out, except that many objects, ends and institutions are doomed. Every thinker puts some portion of an apparently stable world in peril and no one can wholly predict what will emerge in its place".

J.R. Gass
Director
Centre for Educational
Research and Innovation

INTRODUCTION

"I know of no safe depository of the ultimate powers of the society, but the people themselves; and if we think them not enlightened enough to exercise their control with a wholesome discretion the remedy is not to take it from them, but to inform their discretion by education."

These words by Thomas Jefferson reflect a recurring theme in the history of educational institutions. Since the days of the Enlightenment in western culture, schools have been given the task of developing free individuals capable of functioning effectively in free democratic societies. This ideal has been variously expressed by the goals of the progressive education movement, in child-centred education, by the social reconstructionists. The events of the 20th century and the current uncertainty of our times raise some serious doubts about the ability of schools to form free-thinking, socially conscious individuals. Most recently, disillusion with the school as a vehicle for social mobility in meritocratic societies and confusion over the meaning and content of "equality of educational opportunity" have once again brought into question the role of schooling in pluralist societies and the values, objectives, attitudes and skills they are expected to develop in their students.

Certainly, the idea that schools should operate as selective institutions transmitting a coherent culture and set of values to an elite sector of society has been widely challenged and in many instances replaced with more democratic structures. The expectation that students conform to a single academic standard is no longer viewed as a socially acceptable educative function and schools increasingly are expected to provide learning environments responsive to the needs of all students. Nonetheless, the public debate over such issues as whether comprehensive schools reduce standards rather than effectively provide equality of opportunity, or whether an increasing emphasis on personal growth and development is achieved at the cost of learning the basic skills continues unresolved.

Today, if schools are to develop the ability to analyse and provide realistic responses to the often conflicting demands placed upon them by students, parents, taxpayers, the educational establishment, the labour market and policy makers, it requires the imaginative

foresight, resoluteness and critical intelligence of its members and all those who participate in its affairs. It also requires the commitment of individuals who recognise the potential and responsibilities that schools have to function as creative problem-solving institutions, capable of responding to the changing individual needs of their students. There are, of course, constraints, obstacles and barriers to the educational innovation that such a role for schools implies; nevertheless, there is no obligation to abandon the idea that they have a vital role to play in the educative process and in the changing world of which they are a part. The problem really is to understand just what that role is or what it might be.

Schools and schooling cannot compensate for the myriad deficiencies and shortcomings of contemporary industrialised society, nor are teachers a priestly caste with special gifts, insight and authority. The temptation to ascribe inflated functions to schools that they cannot readily perform has to be resisted, first by defining a manageable and defensible role and, second, by recognising that an overall co-ordinated policy of social welfare will involve contributions from a multiplicity of agencies of which schools are only one sub-set.

As far as the processes of education are concerned, the de-schooling movement together with a sceptical, sociological research tradition which disputes the belief that schools can change society in any meaningful way have rightly reminded us that the learning resources potentially available in urbanised societies are vast and varied(1). However, the conventional and even the reformed curriculum, the design of learning situations, and the various groups to which students are allocated for teaching have been much more restricted, inflexible and unimaginative than they need be. Links between home and school are still tenuous in most countries, and the development of individualised - or personal - learning systems, on any scale, is still in the future.

But do the natural limitations of schools and the correctable deficiencies of many of them warrant the growing scepticism about their social purposes and functions and the whole fashionable onslaught on the democratic tradition of mass, popular education in

-
- 1) See the work of:
Ivan Illich, De-schooling Society, New York, Harper and Row Publ. 1970.
Everett Reimer, School is Dead, Harmondsworth, Great Britain, Penguin Books, 1971.
Paul Goodman, Compulsory Mis-education and the Community of Scholars, New York, Vintage Books, 1962.
Christopher Jencks, Inequality, New York, Harper and Row Publ., 1972.

specially designed institutions - the schools?(1)

The criticism of the de-schoolers has gone so far as to suggest that confidence in the agency of schooling has lulled us into the false belief that schools are or can be an effective means of mass education. Schools, it is said, actually mis-educate; similarly goals produce criminals instead of reforming their inmates and contributing to the reduction of crimes, and hospitals spread disease. Following this argument leads to the conclusion that what schools create is not only a population which believes itself to be educated whereas it is not, but increasing numbers whose education has suffered an actual setback as a result of attending school. There is some truth in Mark Twain's jibs about not allowing schools to stand in the way of education, but how much truth?

In the first place, the achievement of near universal literacy in many OECD countries is a contribution largely of schooling. Secondly, it is undeniable that schools, broadly defined, have played the major part in sustaining progress in several of the key sectors of contemporary intellectual life. At a higher level of schooling, universities have been and remain one of the principal agencies for the creation of knowledge, the development of theories and more generally for the support of several forms of intellectual life. The performance of these tasks of invention, transmission and institutionalisation of knowledge is too frequently taken for granted, and is widely criticised because of its supposed social irrelevance, lack of practicality, etc. Yet the cultural and social significance of educationally organised knowledge of the kind that universities and schools specialise in is such that the working of modern society is inconceivable without it.

Of course, education is not reducible to what schools do, nor to the transmission of the historically derived sub-cultures we term the subjects of the curriculum. Nor can it be denied that poor teaching, narrow and unstimulating curricula, rigid school organisation and class groupings that strengthen existing social inequalities and exacerbate injustices, and the many other failings of schools have a mis-educative effect.

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- 1) For a more positive view of the potentials of schooling, see:
John Dewey, Democracy and Education, Toronto, Ontario, MacMillan Co., 1916.
OECD : The Teacher and Educational Change: A New Role, Vols. I and II., 1974.
OECD/CERI: Conference on Policies for Educational Growth, Vol. VIII: Alternative Educational Futures in the United States and in Europe, 1972.
The Nature of the Curriculum for the Eighties and Onwards, 1972.
Case Studies of Educational Innovation, Vols. I-IV, 1973.

As in all forms of institutional life, there is a tendency for schools to develop mystiques and to establish rigid structures to meet assumed ends. As these ends change, however, there is a constant need to redefine the aims and purposes of schooling, and to understand how its functions and responsibilities change inter-dependently with the changing functions of other social institutions. Schools can and should perform an active and positive educative role in society. A first step, however, must be to dispel the notion that, by their very nature, they create problems they were designed to alleviate. In those areas where this criticism is valid, the very nature of schools should be changed, but this can only be accomplished by a better understanding of their problems and of their potential to become creative problem-solving institutions in their own right.

CREATIVITY OF THE SCHOOL

The CERI project on Creativity of the School developed as an effort to investigate how the school could become more actively involved in educational innovation. In conceptualising the project, it was felt that very little practical information was available to educational policy makers and practitioners on the constraints and the potential for building an on-going capacity to respond to new practices and situations into the school or for ensuring that this capacity could remain viable and functional.

Much of the previous work on educational innovation had been based on the use of external change agents, or on power-coercive, centre-periphery, top-down R D and D models which emphasize the process by which change generated outside the school can result in improvements in the teaching-learning situation within the classroom¹⁾. Unfortunately, such reform efforts have been often characterised by the work of an outstanding individual and have failed to take root in the school or outlast the performance of that individual. Interest in looking at the school as the potential problem-solving institution grew from an increasing disenchantment with the effectiveness of centrally controlled "top-down" strategies for innovation which brought little significant change at the user level. An alternative approach formulated by researchers and educators was to devise strategies for innovation that would activate forces within the school itself to bring about change. This has been the approach taken in the Creativity of the School Project.

1) A good summary on innovation strategies is contained in the appendix of a report by Ray Bolam, "The Types of Environment Most Likely to Favour the Active and Effective Participation of Teachers in Educational Innovation" in New Patterns of Teacher Education and Tasks - Teachers as Innovators, OECD, Paris, 1976.

This final report highlights work conducted over the period 1972-75 in the nineteen OECD Member countries that took part in the project.

Chapters I and II summarise the first phase of activity which defined the concept of the project. This phase has been treated in detail in an earlier publication, Creativity of the School. Report on a Workshop held at Estoril, Portugal, OECD/CERI, 1973. Chapters III-VII are syntheses by the rapporteurs for the five sub-activities selected for in-depth analysis in the second phase of activity. These are based on the findings of a number of national country studies prepared for the working conferences held on each subject area and original papers prepared by themselves. The activities and their rapporteurs were: Incentive Systems for Teachers - R.A. Becher, (University of Sussex, England); Creativity and the Internal Organisation of the School - Kurt Nevermann (Max Planck Institute, Berlin) and Tim McMullen (Consultant, OECD); The Role of the Inspectorate - Gabriel Beis (Ministry of Education, France); Professional Support and the Creativity of the School - Klaas Doornbos (Stichting Schoolpedagogische Dienst, The Netherlands); and The Allocation of Financial Resources and Public Accountability - Donald Levine (Teachers College, Columbia University, U.S.A.). Chapter VIII draws together the material presented in these papers and formulates a number of conclusions about the environment conducive to creative problem-solving within schools. It must be said, however, that much of the work done in the course of the project was exploratory - generating hypotheses rather than providing solutions. Nevertheless it is hoped that the report will stimulate discussion among those interested in the educative process and in improving our schools, and will provoke further inquiry and research in this complex area.

The Secretariat would like to take this opportunity to thank Mr. Eric Hoyle (University of Bristol, England), Mr. Malcolm Skilbeck (Curriculum Development Centre, Canberra, Australia) and Mr. Rien van Gendt (Scientific Council for Government Policy, The Hague, Netherlands) for their contributions and assistance throughout the project and on the preparation of the final report.

Chapter I

THE CONCEPT OF THE CREATIVITY OF THE SCHOOL

1. WHAT IS CREATIVITY?

This term has been carefully chosen, for it implies a quality of the intellect and the quality we have sought to assess in this study is an intellectual quality of the school. It is an awareness within the school of the problems it faces, a capacity to devise and adopt solutions whether initiated from outside or generated internally, and a willingness to evaluate their effectiveness. So, as employed here, 'creative' is not limited to meanings such as "inventive", "original" or "divergent" whereby any change or innovation is seen as inherently good in itself. Nor should it be seen as the receptivity of a school to planned innovations from a central authority. Rather it refers to the capacity of the school itself to deal with innovation, and by this definition a school may be creative even if it rejects innovation. What is more, because of its wide discretion in determining the content, organisation and style of teaching and learning, the school becomes a key institution in the response of the educational system to change.

2. THE CREATIVE INDIVIDUAL AND THE SCHOOL

It has been argued that it is the individual not the institution who is creative and that the schools can only adopt the ideas of individuals. Initially new ideas and practices must stem from the imagination and initiatives of individuals and, similarly, innovations developed outside the school will only 'take' if they have the commitment and practical support of the individual teacher. Nevertheless, in practice, innovation must be seen as a function of the quality of the school. There are two reasons for this. Firstly, many innovations are school-wide in their application and cannot be implemented at all unless a number of teachers, perhaps even the entire staff of a school, both agree to, and become committed to, their implementation. Secondly, because of the integration between the different components of the social system of the school, an innovation introduced by a single

teacher will often have repercussions in other parts of the system - perhaps because there is a need for additional resources, or for more time, or because it is predicted upon new pupil roles, or involves a greater degree of integration. This is not to deny the significance of the creative individual, but his or her efforts at innovation can only be really sustained when they take root in and pervade the school as a whole.

3. THE CREATIVE SCHOOL

The Creativity Project was developed on the premise that it is possible to (i) improve the problem-solving capabilities of a system and (ii) release and foster growth in the people who make up the system that is to be changed. Believing that individuals are capable of creative action if conditions are made favourable, it builds on an idealistic or humanistic understanding of human potential and an optimistic assumption of the possibilities for meaningful changes when they are initiated by the co-operative efforts of pupils, teachers and administrators. Fundamental is the belief that creativity may arise within human systems and does not have to be imported from outside.

From this, it follows that the organisational character of the school also becomes a critical factor in the degree to which innovations are generated from within or adopted from without. The critical components of this organisational character encompass the structure of the school, its flexibility, the professional relationships among teachers and the degree to which they are supportive of each others' innovating efforts. It also includes administrative processes such as decision-making, communicating, and resource allocation, and the manner in which they are/are not conducive to innovation. In addition to these components it must be remembered that the school is not a closed system but part of a larger, economic, political and cultural environment which to some degree shapes its internal activities. Clearly the creativity of the school will be considerably limited in its scope if this environment is hostile to innovation or is unprepared or unable to allocate the necessary resources and support.

4. CREATIVITY AND THE ORGANISATIONAL STRUCTURES OF SCHOOLS

Schools do not exist as isolated units, so to understand the factors that enhance or inhibit a school's ability to find solutions to its own problems the Creativity Project had to look, inter alia, at the total infrastructure of the school and at those internal and external relationships that operate within educational bureaucracies.

Certainly when schools are seen and function solely as bureaucratic institutions that maintain the status quo rather than change it, the criticism that they create little or nothing is clearly valid. Yet, if schools per se do not change society, they do exert a considerable influence on the lives of those individuals who pass through them and in turn the world in which they are a part. If they are to educate individuals and equip them with the skills and tools necessary to understand and question the society in which they live, to take an active, interested, and responsible role in the home and in the workplace, in their community, country, and increasingly as world citizens, it is obvious that the educative process, of which schooling plays a major part, must be given very thoughtful and serious consideration. The philosophy of John Dewey, who maintained that the school could not become the main determiner of social change, but could become a significant participant in change, still has relevance to today's debate on schools. The function of the school, according to Dewey, was to produce social reformers and not to presume to reform society directly. Indeed, if the schools succeeded in turning out critically alert, socially sensitive adults, capable of making sound decisions, this would be revolution enough(1).

Despite the appeal of the de-schooling movement to many people and the fact that education is becoming increasingly available through a variety of agencies other than schools, the compulsory educational systems of the Member countries of OECD will undoubtedly continue to exist in their present or similar forms for many years to come. Given the days, weeks and years spent in formal schooling and the increasing discontent with schools articulated across a broad spectrum of society, it is not an idle exercise to question what a viable role for schools could be in (re)defining the aims and purposes of education in rapidly changing, highly technological societies.

Generally the beliefs and values of the dominant groups in a society determine the kind of educational system it chooses to set up. Over time, as new groups become more vocal in their demands for schooling, what goes on in that educational system has some effect on what beliefs and values are perpetuated or changed. Schools, as the primary social institutions responsible for the education of the populations of modern industrialised societies, have a dual role to perform in transmitting and in transforming the values and knowledge of a given culture and thereby creating, renewing or reconstructing the social and cultural order.

Everett Reimer in "School is Dead" has pointed out that different schools do different things, but increasingly, schools in all countries

1) Karier, Clarence, Man, Society and Education, "The Nature of the Child Versus the Interests of Society", Scott, Forman & Co., 1967, p. 246.

of all kinds, at all levels, combine four distinct social functions: custodial care, social-role selection, indoctrination, and education as usually defined in terms of the development of skills and knowledge. That the first three functions have all too often been enforced at the expense of learning situations which stimulate real mental growth and flexibility, problem-solving abilities, and personal development, is an indictment of schools that educators, administrators and politicians have increasingly had to deal with in a variety of settings.

A growing body of research evidence(1) has indicated that the organisational structures of schools are neither neutral nor accidental, and that many so-called "progressive" innovations such as guidance and ability-grouping or vocational education have actually operated within educational bureaucracies as social sorting mechanisms supportive of existing social patterns and social inequalities. While the values and objectives of schooling will never be resolved in consensus by all, the more complete our knowledge and understanding is of how educational systems function and of the structures through which they are organised and controlled the more probability there is of channelling what is there to creative ends.

An education system in which the overarching goal is the cultivation and enrichment of all human beings means a diversity of educational paths where one would not be judged on the basis of a single, uniform academic standard, and where academic failure would not be equated with failure as an individual(2). While considerable changes will have to be made before schools can adequately respond to the basic value that all human beings can be creative, and that their

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- 1) A great deal of work has been done in recent years in this area by American "revisionist" educational historians. See for example:
 - a) Katz, Michael, The Irony of Early School Reform, Cambridge, Mass., Harvard University Press, 1968.
 - b) Tyack, David, Class, Bureaucracy and Schools, New York, Praeger Publ., 1971.
 - c) Tyack, David B., The One Best System, Cambridge, Mass., Harvard University Press, 1974.
 - 2) There is some argument that "revisionist" history is highly interpretive. However the following excerpt from the 1971 OECD Examiner's Report on France (Reviews of National Policies for Education) is a description that could be applied to any number of schools in many countries today:

"... the benefits of the received French educational system came at a high cost, economic, pedagogic and human. Like any other school system, it was not only an institution for intellectual and moral training but for selecting people and channelling them into different social strata and categories ... pedagogic stiffness and inflexibility, inattention to the need for individualisation in pedagogy and a resistance to innovation and experimentation have been among the features of a received system ... teaching was not as effective as it should be in finding and forming talent in all its different varieties ... (and) ... the system exacted a toll in human discouragement."

potential to learn and grow is infinite, it is certainly possible in every school to create a facilitating classroom climate in which significant learning can take place.

The capacity of any institution to adapt to changing circumstances, to create and adapt policies and procedures appropriate to its needs, to re-think priorities among those needs, and generally to solve the problems confronting it necessarily depends upon the qualities and skills of its members. For schools, this means mainly the qualities and skills of the full-time teaching staff and the pupils, but we should not overlook the part-time and peripatetic teachers, youth and social workers, medical staff and so on. Releasing and encouraging the creativity of the schools requires us to consider the different roles exercised by these groups and seek new ways of supporting and involving them. A further point is that the capacity of the school as a total institution to face and solve its problems is greatly enhanced by the support it is able to gain from parents and the wider community. Thus, the creativity of the school is affected by and inter-dependent with that of many other institutions and groups.

As more is known about the general patterns of relationships which operate within and around schools, educational policy makers and practitioners should be able to identify those aspects that are applicable to their own situation, thereby increasing their awareness of the constraints and also the possibilities for effective problem-solving and reform.

The intention of the "Creativity of the School" project has been to identify and focus attention on the complex network of internal and external factors that affect the functioning of the school and the teaching-learning processes which go on within it. These factors have been the subject of examination over the last three years by the national authorities, by educational practitioners and by members of the CERI Secretariat. The questions raised and the ensuing discussions held form the substance of this report.

Chapter II

THE DEVELOPMENT OF THE ENQUIRY

When the Creativity Enquiry was started in early 1972, it had (as already observed) two major objectives: (i) the identification of the principal factors that can inhibit or encourage the creativity of the school, and (ii) an in-depth investigation of these factors, both analytically and in relation to specific country situations.

From the start it was recognised that the way such factors are structured at present (both separately and in relation to each other) often turns on policy decisions taken in a much wider context than creativity of the school and, indeed, taken without any regard to such an objective. The allocation of financial resources to schools, for instance, is arranged more often to control the efficient utilisation of money by the school than to contribute to its problem-solving capacity. Hence the existing situation may cause unintended effects or even hinder the school's capacity to operate in a more creative fashion. Similarly, a decision to establish a network of regional pedagogical centres operating between the schools and the individual education authorities is likely to have the motive of improving the functioning (not the creativity) of the schools in that region. Likewise, the prescription by central authorities of maximum cost limits and minimum building and space standards for the construction of school buildings is a policy decision that leaves to the local education authorities decisions on their actual use. This introduces the notion of the creativity of the school being a function of educational policy decisions taken (for quite other reasons) at a number of levels in the system.

Of the factors which have an effect on the functioning of the school, some may be classified as external and others as internal. An internal factor is defined as one that is operative within the school, although it can be influenced by decision-making processes outside the school, as in the case of authority relations between headmaster and teachers. The reverse holds true for external factors such as the provision of learning materials to a school. This distinction between internal and external factors should not be interpreted as if the school were separated from its environment

by a clear-cut boundary. On the contrary, the exposed character of the school implies a permeable boundary through which external situations and developments can exert such an influence that the distinction between internal and external factors, though useful for purposes of analysis, becomes less distinct in reality.

1. DEFINING INFLUENCES ON THE CREATIVITY OF THE SCHOOL

For the first international discussion and clarification of these matters a working Conference (termed a 'workshop') was convened in November 1972 at Estoril in Portugal with the collaboration of the Portuguese Ministry of Education. The visible outcome of this was three OECD publications: "Creativity of the School: A report based on presentations made to a workshop at Estoril, Portugal" (1973), "Creativity of the School: Technical Report No.1" (1974) which summarised the present position in eight OECD countries, and "Technical Report No.2" (1974) which made a survey of relevant research being conducted in 12 countries.

These publications stand on their own and are all publicly available, nevertheless it is relevant here to give at least the gist of the papers presented and the course of the discussion on them.

As a start, the following factors that appeared to have an influence on a school's creativity were suggested to the participants in a previously distributed document, not as an exhaustive list, but as one appropriate for an analysis of the problems with which the Conference was concerned:

- i) financial resources allocated to the school;
- ii) pre-service training of teachers, headmasters and administrators;
- iii) in-service training of teachers, headmasters and administrators;
- iv) employment conditions of school staff (e.g. possibilities of promotion or transfer);
- v) adequacy of staff skills;
- vi) efficacy in the appointment and evaluation of staff;
- vii) provision of capital equipment;
- viii) provision of learning materials; the relation with producers and the selection and purchase of teaching aids;
- ix) provision of professional support to the school;
- x) relations between the school and its administering authorities;
- xi) relations between the school and other influential outside bodies or individuals;
- xii) attitudes of staff towards innovation and their capacity of putting it into practice;

- xiii) social organisation within the school;
- xiv) authority relationships and decision-making processes within the school;
- xv) expectations of individual parents, employers and other citizens with a concern for education.

Valid as these factors are, however, it was pointed out at the time of their enumeration that separate analysis of them would not only be very onerous but, in fact, unrealistic because of the complex interrelationships between them. At the other extreme it might be attempted to treat the creativity problem as a single complex phenomenon; the practical problems of analysing such a vast area as one entity, however, were altogether insurmountable. The main question, therefore, was how to reduce the complexity of the problem for analysis without violating reality. The solution proposed and accepted was to form some 'clusters' of factors and to focus the analysis on them. This was attractive, not only for pragmatic reasons, but also because the clusters could be based on something that could be actually observed, namely the relative proximity of the various factors to each other. Although every classification could be debated, it was finally agreed to cluster five sets of factors on this basis of the assumed proximity. They were expressed as follows(1):

- i) administrative relationships between the school and outside institutions;
- ii) organisation and relationships within the school;
- iii) professional support to the school from outside;
- iv) interventions for strengthening the schools' creativity (e.g. in-service training and organisation development);
- v) influences of the schools' environment.

As a part of the documentation for the workshop, a number of education specialists were asked to prepare papers on various aspects of these five clusters, outlining the problems involved and showing possible alternative ways of dealing with them. Participating countries also prepared position papers stating what the national authorities considered the most important factors affecting the creativity of the school(2). From four days of discussion around these documents emerged the following observations on the five clusters of factors.

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- 1) For a full discussion of each of these five clusters, the reader is referred to the report of the Estoril workshop, "Creativity of the School", OECD/CERI, Paris, 1973.
 - 2) See Creativity of the School, Technical Report, No.1, OECD/CERI, 1974. For a survey of relevant research completed or currently in progress in twelve Member countries, see Creativity of the School, Technical Report, No.2, OECD/CERI, 1974.

2. ADMINISTRATIVE RELATIONSHIPS BETWEEN THE SCHOOL AND OUTSIDE INSTITUTIONS

The creativity of the school is influenced by the place of the school within its governing institutions and political environment. However, the exact roles of governing bodies, parents' associations and teachers' associations being insufficiently specified at the time, discussion of this cluster of factors focused mainly on the administrative context of the school and its relations with local, regional and national authorities.

Clearly, educational policy-making at national level will shape, at least within certain limits, the degree and scope of the problem-solving capacity of the school and the way in which this capacity is exerted. Thus within the specific context of the national system under consideration both the general administrative structure of a country and the way in which tasks are structured within the individual school will have a dual influence on the discretion permitted the school for actual problem-solving.

Here it is relevant to observe that the general administrative structure of a country is often discussed and analysed in general terms of "centralisation" and "decentralisation"(1). Some countries like France or Sweden are commonly labelled centralised, others such as Great Britain or Australia are said to be decentralised. This distinction between political systems is, however, a rather crude and not particularly revealing description of the actual loci of decision-making power in a country. An effort, therefore, should be made to penetrate a system's label by analysing the discretionary power that is reserved for each administrative level: the national, regional, local and institutional. It is found thereby, for instance, that in the United Kingdom, the employment of teachers is left to local authorities but is set within the framework of nationally agreed salary scales and teacher quotas. In countries such as France or Spain, the national education authorities have more decision-making power with respect to the employment of teachers and as a consequence less discretion is left to individual schools. More discretion, however, does not necessarily result in increased creativity: the crucial factor is how schools use the discretion that is permitted to them.

It is important, too, that the general system of public administration in a country is not fixed once and for all but is constantly subject to subtle shifts in decision-making power and occasionally to major changes. The factors that affect the creativity of the school

1) This subject has been treated in detail by Maurice Kogan, "Administrative Relationships Between the School and Outside Institutions", Creativity of the School, OECD/CERI, 1973.

should always be subject, therefore, to re-examination in the light of changing objectives and functions in the education system. But even within a specific national context that determines the rough contours of these factors and their interrelationships, there is no one model of creativity that can show the optimal way in which they should be structured. On the contrary, within the boundaries of a particular national situation, different configurations of factors may be observed, depending on the specific educational policy adopted. It is neither realistic or desirable to propose a single mega-solution that could cope adequately with all the widely differing characteristics of school systems nor of individual schools within these systems. The very essence of the creativity concept is pluralistic and idiosyncratic.

3. ORGANISATION AND RELATIONSHIPS WITHIN THE SCHOOL

The way a school uses the discretion it has received is largely influenced by a second cluster of factors namely, the internal organisation and social relationships in the school. There is, in fact, a number of existing forms of internal organisation, covering a spectrum from autocratic through consultative to participatory systems. At one extreme of the continuum is the vertical or hierarchical model, based on strong authority and accountability between levels; at the other extreme is the horizontal model in which there is collective accountability through consensus among equal colleagues. It has become clear that the relationship between the internal organisation of a school and its potential for creativity is a close but complex interaction. For instance, to assume that a participatory structure is necessarily the best one in which to foster creativity is a common error on the part of many individuals. It may even be detrimental to a school's creativity because of the completely opposed interests of various competing groups within the school.

The type of internal organisation that is best suited to the needs of a particular school will depend upon a variety of elements such as school size, the composition of the teaching staff, the background of pupils and parents, and the nature of the teaching/learning process. But after a desirable form of internal organisation has been identified, means still have to be discovered and agreed upon in order to channel the organisation and internal relationships of the school in the desired direction. This change process can take many forms: the intervention of organisation development, special training of the headmaster, training of a small development group among the staff, the involvement of staff in part-time work with outside innovatory agencies or the creation of on-going in-service career training for teachers.

4. OUTSIDE PROFESSIONAL SUPPORT TO THE SCHOOL

The principal objective of external professional support to the school is to assist schools in developing an internal capability to deal with problems on an on-going basis. Professional support can mean a variety of things from conferences, colloquia, or televised instruction, to the intervention by inspectorates or the voluntary assistance of specialised support institutions on the national, regional and local levels. A crucial question with respect to professional support is related to the linkage between the support structure and the schools. The main caveat to be kept in mind is the following: the professional support structure should not become a substitute for the creativity of the school. There is the potential danger that outside bodies impose a specific teaching/learning situation on schools and that schools actually become more dependent on external support, thereby reducing their own autonomy. On the other hand "auto-innovation", or the conversion of all external intervention into the capacity of the school independently to solve its own problems, is probably even more unrealistic. Some type of balance is necessary to insure that support structures strengthen the creativity of the school, rather than replace it. This can be achieved by:

- stimulating the school to consider new practices (gathering and dissemination of information on practical experiments, research findings, etc.);
- consultancy to the school/teacher as far as the development, selection, adaptation and implementation of innovation are concerned;
- co-operation with the school in terms of elaborating, introducing and/or evaluating new practices;
- provision and support of in-service training.

In actual country situations, the tasks to be carried out will, of course, depend on the discretion allowed to the schools and the degree to which they make use of the available support facilities. The efficiency of the relationship between support structures and the schools will also depend to a large extent on the horizontal co-ordination that exists between the various institutions constituting this support structure - regional centres, teacher training institutions, in-service training institutions, the inspectorate, and so on.

5. INTERVENTIONS FOR STRENGTHENING THE SCHOOLS' CREATIVITY

Schools are increasingly under social pressure to change, at the level of the teaching-learning process as well as at a structural-organisational level. Educational issues like individualised instruction, the use of educational technology, new interdisciplinary curricula and heterogeneous ability-grouping constantly make demands on teachers to keep up to date with new teaching practices and materials. Improved in-service training programmes and organisation development are two intervention strategies that have been introduced into a number of schools to assist teachers and provide a forum for discussing their problems and concerns. While in-service training has sometimes successfully brought about changes in the individual teacher, it is in its conventional form probably not a powerful enough intervention to bring about sustained organisational change in schools. The emphasis of organisation development, by contrast, is on the system rather than the individual as a target for change. The major elements of an organisation development strategy are: clarifying communication, establishing goals, uncovering conflict and interdependence, improving group procedures, solving problems, making decisions, and assessing change.

The institutional arrangements necessary to apply organisation development should reflect a number of important features:

- People assigned to the role of organisation development specialist should themselves be teachers or principals working on a part-time assignment. (This brings the advantage of being both insider and outsider to the task.)
- The organisation development specialists should not direct, supervise or install, they should rather wait for the school department to demonstrate readiness to make use of aid.
- Organisation development specialists should not offer advice or solve problems, instead they should offer a greater range of group and organisational services than school people ordinarily use, thereby allowing members of the educational institution to work out solutions to their own problems.

6. THE INFLUENCE OF THE SCHOOLS' ENVIRONMENT

The school is often said to be an open system, having a close give-and-take relationship with its environment. However, this image of interdependency is not always reflected in the actual situation: schools at one extreme are sometimes well insulated from environmental demands and at the other seem only to react to outside pressures, providing no positive stimulus of their own. In actual fact,

schools are often subject to demands and control from their immediate environment and from society at large. Society, in this sense, could be seen as an aggregate comprising all individuals and groups with conflicting or converging ideas about schools. Thus the demands of the occupational system, parents, and the local community with their differing expectations about the objectives, tasks and structures of the educational system can represent an important constraint on the creativity of the school.

The occupational system is dependent on the educational system for its selection and certification function, and can thereby serve to inhibit innovation and reinforce the system's stability-bound elements. Parents, who often consider the educational system according to their own past subjective experiences in it, can also work as a conservative element against reform. The school cannot remain insulated from parental expectations, employer requirements, and community pressure, which become explicit and effective in a variety of ways: through the press, television and other communication media, through contact with the school governors, through demands for degrees, and by the selection and promotion criteria of the occupational hierarchy.

7. AN ANALYSIS OF THE ISSUES

The Estoril workshop, where these five clusters were first discussed, marked the transition from the initial exploratory and information-gathering phase of the project to the second phase which consisted of the in-depth study of five specific issues selected by the countries represented at the workshop. These were:

- a) internal organisation and social relationships within the school;
- b) incentive systems for teachers;
- c) role of the inspectorate;
- d) regional and local professional support to the school;
- e) allocation of financial resources and public accountability.

A separate meeting was organised for the expert discussion of each of these five issues, for which participating countries provided background papers that enabled international comparison of work currently being done and a joint approach to certain outstanding problems.

Following each meeting, a synthesis paper was prepared from the country studies, the discussion and the personal expertise of the rapporteur. These topical reports have provided the basis for the following five chapters.

Chapter III

INCENTIVE SYSTEMS FOR TEACHERS

1. INTRODUCTION

Innovations in education may derive from a variety of sources - from changes in prevailing social or political values, from advances in technology or human understanding, as well as from more specifically educational considerations. But if such innovations are to have any significant effect in practice, one condition remains essential: that they should be assimilated and adapted within the context of the individual school. The concern of this paper is therefore with the creativity of the school in a general sense, a sense in which the origins of a particular innovative idea are less relevant than its acceptance and effective implementation in the institutions which collectively comprise the educational system of a locality, a region, a country, or a federation of nation states.

The focus of the present discussion, within the broad framework of the CERI Project on Creativity of the School, is on those conditions that promise positively to enhance the commitment of individual teachers to "the advancement of education". What constitutes educational advance must vary from context to context: as the work of Beeby and others has convincingly shown, what appears a viable and promising innovation in one system may prove unworkable or unacceptable in another. No attempt will be made here, therefore, to categorise what creative educational change might comprise. It will be taken that those directly involved in any given educational system are best situated to decide what innovations are most likely to offer possible solutions to their particular problems or possible ways of meeting their particular needs.

The requirement, then, is to consider how teachers can best be encouraged and supported in implementing (though not necessarily in originating) whatever educational change may be deemed necessary or desirable within the particular situation in which they work. Two limitations to the discussion must be made clear at the outset. First, its emphasis is a practical rather than a theoretical one. It does not aim to develop hypothetical models whose elegance merely reflects their remoteness from educational reality. Its objective is rather to

identify the conditions which, while generally feasible in economic, political and organisational terms, seem likely significantly to increase the teachers' involvement in 'creativity' in the sense already defined. Second, its approach may be described as structural rather than psychological. It does not deal with the intractable theme of desirable changes in human personality, but rather with possible modifications in the roles of teachers and the contexts within which they perform those roles.

Starting from this initial approach to the theme of teacher incentives in relation to the creativity of the school, the subsequent sections of the paper will consider first the recognisable disincentives which currently obtain in existing educational systems and the proposed incentives which must be rejected on practical grounds. Having briefly examined these, it will attempt to analyse the basic requirements for teaching as a career and as a profession; and finally it will put forward some positive suggestions for possible implementation.

2. RECOGNISABLE DISINCENTIVES

It requires only a limited exercise of the imagination to put oneself in the position of a teacher who is aware that his work lacks any recognition either from his direct superiors within the school or from the wider community it serves; who is denied any financial compensation for whatever additional efforts he may make beyond what is minimally demanded of him; who sees no long-term prospect of promotion while he remains in classroom practice; and who is given no opportunities to enhance his professional competence or to keep himself informed of changes in educational thinking or of general advances in knowledge within his own subject area. It requires even less imagination to see that such a teacher is not in general likely to make a major contribution to the creativity of the school.

Of course, things are never in practice as bad as this composite picture suggests for, if they were, the whole educational process would be in danger of collapse. But every feature in the above pastiche, taken individually, has its genuine counterpart in one or more existing educational systems, so it may be profitable briefly to examine each element in turn, and to consider how and why it may inhibit educational innovation.

Absence of internal recognition

Whether or not someone is motivated strongly by the expectation of approval by his colleagues and his superiors is clearly a question of personality. However, it is a matter of established fact that the

general social climate of an institution exerts a powerful influence on its members. The attitudes of the senior members of the institution are particularly influential in establishing this climate. It is obvious, for example, that if a head teacher offers in his general behaviour a strong encouragement to creative innovation, his colleagues will be more likely to respond to the need for change than if he displays a positive antipathy. While this may provide a useful reminder of the importance, in any programme to promote the creativity of the school, of the responses of those in positions of authority, the climate of opinion in an institution and the relationships between its members cannot readily be changed by outside measures. Although a significant factor, internal recognition of innovative work depends very largely on random variables. It may, however, be indirectly enhanced by certain structural changes, such as a more open form of institutional organisation and improved external communications with other parts of the educational system as a whole. (Section 5 returns to a further consideration of these questions.)

Absence of external recognition

As in the case of internal recognition, the prospect of approval by the inspectorate, by other external authorities or by society at large will influence some individual teachers more than others. But the perceived absence of any such prospect - or, worse, the expectation of positive hostility - is clearly an inhibitor to creative change. In this case, however, improvement in the degree of support for the innovative individual is more susceptible to direct action and less a matter of accidental circumstance. Some possible measures to help provide recognition, by both administrative authorities and the general public, for teachers' receptivity to change - particularly in terms of career structures and professional status - will be outlined in Sections 4 and 5 below.

Lack of financial incentive

It would be naive to suppose that the surest way to improve the teachers' receptiveness to change lies in direct financial reward. Although every man may have his price, few of us like to feel that we are being bought: and what we are concerned with here is genuine receptivity to change rather than payment to go through the requisite motions. However, it would be equally naive to expect teachers to display markedly greater altruism than the rest of human kind. If the creativity of the school requires - as it must often do - greater commitment on the part of teachers to their work, together with a greater expenditure of time and energy, it is only equitable to acknowledge this in the calculation of their total salaries. However,

the nature and form of any additional payment demands careful consideration: as will be argued in Section 3, a blanket salary increase for all teachers is not likely to be either practicable or effective. The question will be taken up in more detail when considering teachers' career structures in Section 4.

The impossibility of promotion

Not all teachers are driven by a strong sense of personal ambition; but equally, not all teachers are totally unambitious. So questions of promotion, like the (closely connected) questions of financial incentive, must be acknowledged as relevant incentives to creativity. In some systems the possibility does not arise, since there are no intervening promotion grades between the position of an ordinary class teacher and that of a school head; the new entrant to the profession is formally on an equal standing with a teacher of many years' experience. Such an arrangement may well reflect strongly held social values (for example, a dislike of hierarchy and a preference for communities of equals). Where this is so, such values cannot lightly be brushed aside. But it should be recognised that educational systems organised on this basis are denied one possible means of stimulating teachers to respond to change. The existence of an internal promotion system is not of course sufficient; it must be used, as a matter of clear policy, to recognise creative individuals and to reinforce innovative programmes. This issue leads directly into a discussion of teaching as a career, and will be considered further in Section 4.

The denial of opportunities for increasing professionalism

New roles for teachers, and changes in the contexts within which they perform these roles, call for the application of fresh knowledge and the exercise of hitherto unfamiliar skills. So one important prerequisite, if significant numbers of teachers are to respond creatively to change, is to provide adequate opportunities for the acquisition of such knowledge and skills. The theme of in-service training will form a major component of the subsequent discussion of teaching as a profession in Section 5. At this point, it may be sufficient to note that, in certain existing systems, very few organised opportunities are provided for practising teachers to familiarise themselves with current thinking on such topics as curriculum development, the planning of learning resources, the use of independent study techniques, or the teaching of mixed ability groups. Equally, subject specialists in these systems are given little help in keeping abreast of current advances in understanding. The rare courses that are organised for serving teachers demand spare time attendance during evenings, weekends or holiday periods. Not only is such attendance unpaid, but in

many cases teachers are required to find travel and living expenses, and sometimes even course fees, from their own pockets. In these circumstances, it requires a dedicated teacher indeed to be prepared to develop and improve his professional skills; and, not surprisingly, the educational systems in question do not manifest themselves as highly responsive to change.

3. IMPRACTICABLE INCENTIVES

Having noted some of the major factors which may inhibit teachers from responding to creative opportunities within their schools, it may be appropriate to undertake a further ground-clearing operation of a somewhat different kind. In this Section, a number of proposals which have on occasion been put forward as positive incentives to innovativeness will be critically examined. In each case, objections will be advanced against their effectiveness in promoting the creativity of the school, and it will be suggested that in the light of these objections they cannot continue seriously to be entertained. The proposals in question are for a system of rewards through promotion outside the school for an overall reduction in teaching time; for a standard increase in basic salaries; and for a progressive diminution in the size of classes. Each of these will now be considered in turn.

Promotion opportunities outside the school

It is a problem faced by every country that many of its active, highly motivated and talented teachers tend to be promoted out of their classrooms into posts in administration, the inspectorate, or teacher training institutions (and additionally, in certain cases, able primary school teachers can acquire further qualifications that enable them to move into the secondary sector). It may therefore seem surprising that the provision of external promotion opportunities is sometimes advocated as a stimulus to creativity. As will be argued in Section 4, a well articulated career pattern is likely to enhance the innovative possibilities within any educational system: but to be fully effective such a pattern must be related to overall policy goals, and must also allow scope for innovative minded teachers to exercise and develop their particular professional skills. To promote large numbers of such teachers out of active service into full-time administration or training college work is a self-defeating policy, particularly where their own strengths lie in helping the learning process rather than in management as such. The issue, however, is a complex one. There are cases in which conflict can arise between the innovative policies of the system as a whole and the needs of individual schools within it. So any means of breaking down the barriers between classroom teaching and other educational activities is to be welcomed

as helping to stimulate the flow of innovative ideas. The possibilities of temporary exchange arrangements of dual appointments have yet to be fully exploited in this connection. It has sometimes been suggested that appointments outside the school - say to the inspectorate or the teacher training sector - should be comparatively short-term, and should enable the individuals concerned to return to school teaching posts. How far this is practicable may vary from one system to another; but problems of relative pay and prestige are likely to be an inhibiting factor. One possible alternative would be to encourage individual exchange of, say, a year at a time between innovative teachers and supporting staff outside the school. Another, which is beginning to gain currency in some countries, would be to develop special posts combining advisory or training responsibilities with part-time teaching.

Reductions in teaching time

The adoption of any major innovation, the process of adapting it to local circumstances, and the resulting need for staff to change from familiar roles and established personal teaching styles, inevitably call for additional effort on the part of teachers. It has been argued that, in consequence of this, proposals for substantial change should be accompanied by a negotiated reduction in the standard work load of the personnel concerned. In questioning the effectiveness of this suggestion, it must be acknowledged that a reduction of teaching time may prove essential in certain cases: for example, where a particular teacher is required to produce a substantial quantity of new learning materials, or to undertake intensive learning of new professional skills, the necessary time to do so may simply not be available without some reallocation of pupil contact hours. But the reallocation of the effort of a limited number of teachers is quite a different proposition from an indiscriminate change in the contractual conditions of the staff of a whole school or even a whole school system.

Any proposed innovation which necessitated such an arrangement would have to be seriously questioned on cost-effectiveness grounds. The largest call on educational expenditure in any country is in terms of professional salaries, and any overall increase in manpower (such as would be demanded by a general reduction in available teaching hours) would therefore be highly inflationary. The proposal could be questioned on political as well as economic grounds, since the public at large is already inclined to regard teachers as having an enviably small work load. Of course, even in systems where (for example) teachers are formally required to teach for a maximum of nineteen hours a week for a maximum of forty weeks a year, the actual time spent in preparation, marking of pupils' work and the like will result in a far greater total expenditure of time. Nevertheless, this additional load - because hidden - is difficult to quantify,

and will inevitably vary from the most conscientious individual to the least. A further reduction of the visible time commitment of staff is not therefore likely to be accepted unquestioningly by either legislators or taxpayers.

But aside from these arguments against its practical feasibility, such an arrangement can be seen in organisational terms as a blunt instrument at best; for while the majority of teachers might wish to use the additional time for productive purposes, it would be difficult to ensure that everyone's needs in this respect could be adequately provided for - and there would always remain a residue of individuals who would simply take advantage of the situation to work shorter hours. It will be suggested below that what is in fact required to allow room for greater creativity is a selective redeployment of teacher time, accompanied by a better provision of supporting services.

Increases in basic salaries

Essentially similar arguments can be advanced against the (closely related) proposal that large-scale innovation, because demanding of additional effort on the part of the teaching profession as a whole, should be compensated for by an overall improvement in salary scales. It has already been acknowledged in Section 2 above that it would be both unrealistic and unfair to expect teachers to work a great deal harder without any financial compensation. But creative innovation is of its very nature bound to have different impacts on individual schools and individual teachers within them. Apart from any economic or political objections to indiscriminate salary increases, their effects would not distinguish between those individuals committing a major amount of their time and energy to implementing change and those who were only marginally affected by it.

Having regard to such objections, it must nevertheless be noted that teachers' salary negotiations could in principle constitute a major instrument of educational policy. Although this may seem obvious enough, it is surprising to find that in many systems such negotiations are in fact conducted without any reference to policy considerations, and that new salary arrangements may sometimes prove directly inimical to a desired educational change (for example by encouraging able teachers to move out of a particular type of innovative institution into a less creative work situation, or by minimising the incentive to view teaching as a long term career). A structural change which deliberately brought together considerations of pay and policy, rather than isolating them in separate branches of a national ministry or local administrative unit, could therefore prove highly productive. But whether or not this general arrangement can be sensibly achieved,

it seems once again important to argue for selectivity in relating salary increases to additional work loads. A specific increment to the basic salary scale which is clearly related to a new teaching responsibility is both less costly and more effective as an incentive than a standard, across-the-board, rise in the level of teachers' pay.

Reductions in class size

'Oversize classes' form a common cause of dissatisfaction on the part of teachers and parents alike, and the periodic campaigns that are mounted to reduce the maximum size of pupil groups therefore tend to attract widespread popular support. However, this measure for gauging the degree to which teachers are over-extended, and pupils under-attended, can be a highly misleading one. Schools in most systems have some freedom in deciding how they will deploy their available teaching resources, and do not in general distribute them evenly between different age and ability groups. Children in need of remedial help, and academic high-fliers at the upper end of the school, are often given greater than average attention. Moreover, some teachers may at a particular time have reduced teaching commitments in view of some special assignment which they are undertaking. So it is perfectly possible, for instance, for a secondary school with an overall pupil/teacher ratio of 15:1 to have one or two classes of 35 or more. While fully accepting, therefore, that any educational system will prove ineffective if there are not enough teachers to meet basic needs and to avoid excessively large classes, it does not follow that every increase in total staffing will necessarily justify the extra costs. The available research suggests that a reduction in average class size from, say, 30 to 25 pupils (which implies an increase of 20 per cent in the teaching force) would not have a marked effect on educational quality - though it would clearly result in a substantial increase in educational expenditure.

Innovative schools in many countries are in any case attempting to break the fixed learning pattern of one teacher to one class of 30 or so pupils, and are experimenting with more flexible and varied groupings engaged in different types of learning activity - individual project work, small seminars involving 15 or so students, and occasional much larger lecture groups of a hundred or more. In this context, a reduction in the overall pupil/teacher ratio does not comprise the only available option, or even necessarily the best one. Even allowing for the political acceptability of a reduction in class size, and its deceptive simplicity as an organisational device, it is not any more likely than is increasing salaries or reducing teaching time to enhance the creativity of the school or to result in an educational improvement commensurate with its costs. Once again, a systematic redeployment of teacher resources is likely to

prove more viable than a steady increase in the totality of those resources.

4. TEACHING AS A CAREER

The educational system, like any other human organisation, depends ultimately for its effectiveness on the quality of its staff. At any given time, this quality will be raised or lowered according to the overall standard of new entrants to the profession. But in order to compete against the many other current demands for able and creative recruits, teaching must be seen to be a worthwhile career. This section will therefore concentrate on considering the organisational arrangements most likely to improve career prospects in teaching, to stimulate the recruitment of men and women with the requisite human and intellectual skills, and to maximise the creative potential available within the system.

Salary structure

The determination of teachers' basic salary scales is regarded in many countries as a matter to be settled independently of educational policy. With the increase in unionisation and collective bargaining, attention tends increasingly to focus on the overall increase of minimum salary rates, particularly at the lower end of the scale. This is understandable in a period of rapid expansion of the educational system, such as most countries have experienced in the past decade. The demand for new recruits and the resulting rise in the proportion of younger teachers focuses the attention of negotiators on the need to raise initial salary scales to make teaching appear competitive with other careers in the public and private sector. The teacher unions, responding to demands from the majority of their members, who are increasingly to be found in the early stages of their careers, reinforce this tendency. But because of the political and economic pressures to control overall public expenditure on education, any increases made in starting salary scales tend to be compensated for by a relative depression in the level of middle and upper salary rates. One result is to make teaching financially attractive as an initial career, but to discourage long-term commitment by providing a markedly less attractive salary position in middle and later life. Consequently, there tends to be a significant migration out of teaching after an initial period of five or ten years, thus depriving the teaching force of many of its more valuable (because more experienced) members.

It might be argued that a migration of this kind is healthy, in that it maintains a young and innovative teacher population, and also

relieves the profession of its less committed or less successful members by providing them after an initial trial period with exit incentives into other sectors of the economy. But this argument is open to serious criticism on two counts. First, it implies that it is the less successful teacher who chooses to migrate in early mid-career, and second, that it is the younger rather than the more experienced teachers who are most open to creative innovation. Once it is acknowledged, however, that successful teaching demands many of the human qualities that are at a premium in other walks of life, it becomes clear that those migrating early are likely to be the more rather than the less valuable members of the teaching force. The less adequate personality, finding fewer openings available elsewhere, will tend to remain within the familiar safety of the school system: the more versatile and adventurous may be attracted into a second and more financially rewarding career after a comparatively short initial period. The assumption, too, that it is the younger teacher who tends to be the more innovative is not borne out by experience. In actuality, teachers lacking the confidence that comes from a substantial period of successful practice tend to cling to the established patterns of the past, modelling their activities on those recollected from their own school days. It is rather the mid-career teachers who are able to stand back sufficiently from what they have been doing to subject it to critical review, and who are sufficiently sure of themselves to be prepared to experiment with new techniques and to explore new roles even in the face of scepticism or opposition from their more conservative colleagues. This phenomenon has been particularly marked in those parts of the system in which major curriculum innovations have taken place. Many of the teachers involved have commented on the invigorating effect of change, and hence of its attractiveness, after some years of following what has come to appear to them a monotonous routine.

This particular aspect of salary structure has been discussed in some detail both because of its significant policy implications and because it illustrates the general importance of relating teachers' salary negotiations to the wider context of educational innovation, rather than conducting them solely in terms of a comparison with the current labour market in other sectors of the economy. But it does not necessarily follow from the need to create a viable and attractive long-term career structure that a system of automatic annual increments should apply throughout the teacher's professional life. There must remain scope in any innovative organisation to redeploy labour, and one powerful mechanism for such redeployment lies in selective financial incentives. Accordingly, consideration must next be given to the possibilities of retaining able mid-career teachers within the profession by developing an appropriate system of merit awards.

Clearly, in order both to attract into teaching and to retain in the school system those likely to be responsive to creative change, a reasonable balance has to be struck between the short-term incentive of a competitive entry scale and the longer-term prospect of a financially attractive career in middle and later life. If later salary rates become too far depressed at the expense of high initial salaries, this is likely to act as a disincentive to the more far-sighted potential entrants to the profession, and to result in an increasingly unstable flow of new manpower into the system and out again after a relatively short period. This in its turn will tend to aggravate the demand for more young teachers and steadily to reduce the proportion of able senior staff on which the creative leadership of the system must ultimately depend. This appears at present a serious danger in some countries, and may suggest the need for a periodic review of the current overall pattern of resource allocation on teachers' salaries.

Specialisation of roles

The desirability has already been noted, within a reasonably balanced basic salary structure over a teacher's long-term career, of retaining sufficient financial scope to operate a flexible system of merit awards designed to stimulate creative innovation within the school. The determination of the nature of such awards is likely to be a sensitive issue in educational politics, particularly in hitherto undifferentiated systems, where no special posts exist other than that of head teacher. The suggestions which follow are therefore tentative ones that may well need to be modified on the basis of negotiation between ministries and teacher unions in a number of countries.

Teaching has so far been perceived as a more-or-less unitary activity, in which the teacher's main role is to instruct a standard group of some 30 pupils in some specified aspect of the curriculum. The pupils themselves in this situation have been expected to adopt a largely passive role, listening to the teacher, taking notes when instructed, and perhaps carrying out a limited number of brief assignments under his direction. In many systems, however, this traditional pattern has begun to break down as a result of pedagogic demands for more active and independent learning, political demands for the abolition of segregation by academic ability and the consequent breakdown of more-or-less homogeneous learning groups, and social demands from both pupils and parents for a less authoritarian relationship between teachers and taught. These influences have combined to create a more complex and varied set of required roles for the teacher. Besides their traditional function as presenters of information, school staffs may now be expected to create or adapt appropriate materials for independent or small group learning, to manage a complex

and varied pattern of classroom activities, to devise new forms of assessment which can be used for the diagnosis of individual needs rather than for the competitive grading of pupils, to work as tutors on a one-to-one basis or as leaders of small seminar groups in which the children themselves play an active role, and to serve as counsellors on the particular intellectual or emotional difficulties experienced by their students. This steady widening of the range of skills demanded of the teaching profession is likely to place severe demands on those who find themselves unable to cope with the complete repertoire at the necessary levels of competence. It may suggest the desirability - or even demand the necessity - of a more systematic differentiation of role among the members of a school's staff.

A differentiation along these lines is likely to increase, rather than diminish, the attractions of teaching as a long-term career. Class teachers who show a particular flair, say, for seminar leadership or for the development of learning resources would be able to specialise in their chosen areas and thus develop skills of a high level. On the analogy of medicine, social work and other service occupations, this would be likely to result in a higher level of intrinsic job satisfaction, since there would be scope to choose and concentrate on areas of individual excellence - though it would no doubt be desirable to retain the functions of the 'general practitioner' for those with an all-round ability who wished to continue to pursue a generalised role.

A system of merit awards related to particular functions of this kind would have two main advantages. In the first place, it would reduce the extent to which any merit system is liable to leave individuals feeling unfairly treated. Awards made on the basis of some broadly-defined level of 'general competence' tend to be open to the charge of favouritism, since those in authority are not seen as having clear criteria for singling out a particular candidate for such an award. But where the criteria are specifically related to ability in, and responsibility for carrying out, a specialised activity, there is less room for apparently arbitrary choice or personal preference. In the second place, the nature and scope of such awards could be redefined when required to meet the needs of a given innovative policy. Thus, for example, if the main need for creative change in a particular school at a particular time were seen as lying in the provision of more extensive remedial diagnosis and counselling facilities for pupils, new posts for carrying out these special responsibilities could be created and filled by teachers with the requisite skills who would then be entitled to special salary increments.

Even where the principle of merit awards is accepted, however, a further point remains to be clarified - namely, who is to take the ultimate responsibility in choosing the recipient of such awards. If

it is the head teacher or a committee of senior staff, the system could be misused to make awards merely by seniority, regardless of creative potential. If it is external authority - say the inspectorate - the danger would be that of insensitivity to the individual school's needs. The best arrangement would perhaps be for a choice made jointly by appropriate representatives of the school and the central administration. This would have the added advantage of ensuring an open discussion between the two of relative priorities for creative change.

In those systems in which salaried posts of special responsibility have not existed in the past, the whole question of merit awards is likely to appear as a contentious issue. It may therefore be worth concluding this discussion with a few brief remarks on the distinction between performing a specialised role and occupying a hierarchical position in an authority structure. In a school system which has developed highly democratic traditions (in which all members of staff, senior and junior, apart from the head teacher, have an equal voice in decision-making) there is no valid reason for changing such traditions with the introduction of specialised posts carrying an additional salary element. For here - unlike the cases in which special salary awards are related to positions of managerial seniority - carrying out a specialised professional function need not be taken as in any way implying the exercise of control over one's colleagues or the occupation of a special position in the management of the school. And in those systems whose tradition has allowed for such intermediate posts between head teacher and assistant staff as deputy head, head of division, head of department and the like, the two systems of merit award could well exist side by side to allow an added set of career incentives designed to encourage school-based innovation, and to permit able teachers to remain in active classroom practice rather than seeking advancement outside the school.

The effective use of professional skills

The move towards a greater differentiation in teacher's roles discussed above has a further set of implications. So long as teachers see themselves as exercising a general responsibility for all the activities carried out by their pupils, they tend to resist the introduction of ancillary help in the school in general and their own classrooms in particular. But the long-established tradition of personal privacy, where each teacher could be regarded as exercising sole territorial claim over the space in which he worked, and sole rights of authority over the pupils in his charge, is gradually giving place to a more open system of team work. And as a result, the question can now legitimately be raised whether certain of the less skilled functions in the school might not be carried out by less fully qualified personnel.

The introduction of para-professional staff into the school system could bring a number of career advantages to teachers. Various studies of how the average teacher deploys his or her time have suggested that traditional class teaching involves a relatively high proportion of routine work which does not adequately exploit the teacher's professional abilities: the ordering and issuing of books and materials, the duplication of notes and assignments, the rearrangement of furniture and the setting-out of apparatus and equipment, and so on. Much of this work could be more economically handled by aides who did not possess a comparable standard of training, including (as in some experimental schools) voluntary parent labour and student teachers as well as technical and secretarial staff.

The result of introducing such staff would be to give teachers greater opportunity to experiment with new developments generated either within or outside the school: and since their time would in consequence be used more productively, the resulting savings could be expected not only to pay for ancillary help but also to make possible a greater level of expenditure on material resources of all kinds (including the adequate typing and duplicating facilities that many schools now lack, together with audiovisual equipment and materials to support independent learning).

A teaching career based on an underlying support structure of this kind would present a more attractive prospect to able recruits who wished to have greater opportunity for exercising their special skills, and to whom the traditional role of the class teacher, with its sizeable component of low-level routine, may well seem unappealing. Consequently, the progressive development of such a support structure demands serious consideration, both in terms of enhancing the career status of teaching and in terms of increasing its component of professionalism (other aspects of this latter feature are dealt with in Section 5 below).

The public status of the teacher

In the earlier part of the present century, teaching enjoyed in many countries a relatively high status in the community. The teacher, along with the doctor, the lawyer and the priest, was seen as playing a leading and responsible part in society, and competition for entry to a teaching career ensured a generally high standard of recruit. But with the development of a much more complex occupational structure, teaching has now to compete with a considerably greater variety of professional and quasi-professional occupations: and opinion surveys carried out in a number of countries have suggested a relative decline in its status vis-a-vis other hitherto comparable careers.

It is doubly important to seek the means of combating such a decline, and improving the 'public image' of teaching. In terms of

new entrants to the profession, those able enough to choose between a wide range of possible social service careers are likely - lacking first-hand experience - to be heavily influenced by the nature of this public image. And in terms of those already engaged on a teaching career, the feeling that they are doing a worthwhile and socially valuable job (which is directly relevant to their sense of self-confidence and self-respect, and so indirectly relevant to their capacity to generate or assimilate creative change) is likely to be diminished or enhanced according to the way in which they are regarded by the community at large. In concluding the present analysis of teaching as a career, brief attention will therefore be given to ways in which the general status of teaching, and especially the status of innovative teachers, might in practice be enhanced.

One of the most notable features of the average school in most systems is its relative isolation from the society whose children it serves. To an outside observer it might seem that teachers, anxious to preserve their professional mystique, deliberately cut themselves and their work off from public scrutiny. In the much more questioning climate of today, however, such secrecy is no longer likely to be accepted (as in the past) as a mark of natural authority, but rather to be interpreted as an indication that what is being hidden is somehow discreditable. The tradition of discouraging open communication between school and community therefore demands careful re-examination.

Those schools that have already attempted to develop a closer relationship with their neighbourhood - with local taxpayers and employers, and especially with parents - have not always found it an easy task. Everyone who has been educated within a traditional system tends to have highly conservative expectations of what the educational process should comprise, and the more progressive a school is in its own policies, the more effort it has to put into convincing the outside populace that it is not failing in the proper conduct of its task. In the long term, however, this effort may be seen to be fully justified. Unless the general public have some understanding of why their children are learning in a way different from that which they themselves experienced, a conflict of expectation is likely to be generated between home and school which could prove both unproductive and harmful to the individual child. An innovative school has therefore a positive obligation to make its practices generally understood. Once such understanding is achieved, the gains include not only an informed public appreciation of the values of innovative practice, but also an enhanced status of the innovators concerned. And when teaching can thus be perceived as a potentially highly creative pursuit, public expectation may well help to release the creative energies of other existing teachers as well as to increase its attractiveness as a future career.

1. encouraging a more open public discussion of educational issues, and hence a more widely-based understanding of the case for innovative developments in the educational system, the mass media can have an important part to play. Reporters for national and local newspapers and broadcasting networks, especially those who are able to develop a responsible specialised knowledge of educational issues, are therefore deserving of every encouragement. Educational journalists have in a number of countries already shown themselves to provide one of the most effective means of raising the general level of debate on the subject, and of accelerating the spread of worthwhile new ideas. The extent of their contribution to the creativity of the school should not pass unremarked.

5. TEACHING AS A PROFESSION

The preceding discussion has been concerned with possible measures to strengthen career opportunities and incentives for teachers. But teaching has also its more directly professional aspects which cannot be neglected in any systematic attempt to stimulate worthwhile innovation. The extrinsic incentives of improved financial and material working conditions, and improved public status, also have important counterparts in a series of intrinsic incentives. If the former help to attract creative people into the educational system, the latter help to make it plain within the terms of the profession itself that creativity is deserving of encouragement and recognition by colleagues as well as by the community at large. A full sense of satisfaction in one's work cannot be achieved solely by external measures; most people require in addition a more direct and personal assurance that they are doing a worthwhile job. Accordingly, the present Section concentrates on some possible means of supporting the teacher's sense of professional commitment to his task within the context of an overall improvement in the quality of education.

The continuing development of professional competence

There has been much recent discussion of the notion of recurrent education, and it is coming increasingly to be accepted that, in an era of rapid social and technological change, learning must be viewed as a lifelong process rather than one which terminates abruptly during late adolescence or early maturity. And yet it is a curious fact that the implications of this idea have not yet been very specifically related to the needs of a group who above all need adequate opportunities for 'éducation permanente' - namely, the educators themselves.

The extent of the provision for the continuing professional development (or, as it is sometimes more mechanistically called,

"in-service training") of teachers varies considerably from country to country. This is perhaps not altogether surprising, given the diversity of social and political values - and of educational systems as such - in the communities concerned; although it makes it difficult to find sufficient common ground on which to base a widely applicable discussion. What is generally true, however, is that no country yet appears to have been able to put into effect a fully satisfactory set of arrangements to cope with current and future needs in this regard.

If the 1960s were a decade during which attention was understandably concentrated on quantitative problems - and particularly the hitherto unprecedented expansion of educational demand, which brought in its train the need for a rapid increase in teacher supply - the emphasis in the 1970s is more noticeably on qualitative improvement. Policy makers in a number of countries now appear to have accepted the validity of the thesis that the level of professional expertise of the teachers in any system bears a direct relationship to the quality of the education which that system is able to provide, and that improvements in staffing competence pay a rapid dividend in terms of the enhancement of students' learning opportunities. Since even the more significant innovations in initial teacher education are found to be comparatively slow to take effect (because the proportion of new entrants to the profession at any given time is small in relation to the total teaching force, and their potential influence as change agents is relatively limited), it is increasingly recognised that the main opportunities for substantial improvement must lie in the more effective development of existing capabilities, and the generation of appropriate new skills, among the population of teachers already established within the school system.

But although this latter proposition is no longer in serious dispute in those countries currently giving a high priority to educational innovation, its full implications remain still to be worked out in practical terms. The proposals which follow are therefore largely speculative, in that their validity remains to be put to the test of experience.

Firstly, it is suggested that arrangements for continuing professional development should be as far as possible system-wide. In other words, they should avoid an undue concentration on one particular sector or one particular level of the system (save in the exceptional case of a major structural change with immediate practical implications, such as an extension in the period of compulsory education, requiring a crash programme). The rationale behind this suggestion is to avoid the present piecemeal and fragmentary approach, where potential improvements at a particular stage may be nullified by a lack of adequate continuity. Because learning is a longitudinal process, a marked improvement in teaching quality at

one point in the continuum is likely to count for less from the point of view of a pupil than a more modest improvement in the standard of overall provision. Accordingly, any co-ordinated approach to recurrent education for teachers should be designed with the needs of the totality of pupils' age and ability groups in mind.

Secondly, opportunities for teachers to familiarise themselves with new concepts, techniques and findings should be periodic. It is inherent in the notion of 'éducation permanente' that continuous change demands a regular and planned learning provision, rather than one which is randomly (and in all probability sparsely) scattered through the years of working life. The length of each new cycle of learning, and the interval between successive cycles, will inevitably vary from one country to another, depending both on economic feasibility and the perceived extent of need. It would in any case be pointless to put forward specific recommendations before some retrospective assessment can be made of the results of practical experience. But the essential point to be made here is that planned in-service provision should be based on the likely requirements of a teacher throughout the span of his professional career, avoiding a merely ad hoc series of occasional relearning experiences.

Thirdly, the nature of such provision should ideally be context-specific. One of the major problems in designing satisfactory initial teacher education programmes is that even in the short term, the career patterns of individual student teachers remain highly unpredictable. Because it is seldom possible to say whether a given student will secure an appointment in a sparsely-populated rural or densely-populated urban area, or in a school in a mainly prosperous or predominantly underprivileged milieu, the courses he attends have to be designed for all contingencies, to be all things to all men. The result is to force such courses towards a high level of abstractness and generality, in which the content is felt by many students to lack practical relevance. But once a teacher is firmly established in his career, his pattern of responsibility becomes relatively stable, his short-term prospects more easy to identify and his existing needs less difficult to diagnose. Recurrent programmes for serving teachers can therefore exploit more fully the pedagogic advantages of working within a specific frame of reference illustrated by relevant and concrete example. Moreover because participants in such programmes will be able to share between them a wide range of practical experience, much of their re-thinking of educational issues can draw on and be tested against the reality of this experience, rather than depending upon the artificial oversimplifications of a highly theoretical approach. A new opportunity for analysis and reflection grounded in the realities of the classroom may well contribute not only to the growth of individual professional understanding but also to the general currency of educational thought.

The fourth suggestion is a corollary to the third: that the major part of any programme of recurrent education should be school-based. The conventional pattern of withdrawing one or two teachers for a short period from their normal working environment to introduce them to innovative ideas is increasingly recognised as ineffectual. Without an accompanying change in the general climate of the institution in which they work, the invigorating effects of in-service courses on those who attend them are rapidly damped by the incomprehension (or even active hostility) with which their attempts to implement change are greeted by the majority of their colleagues. In contrast, experimental programmes involving all the relevant staff likely to be affected by a particular innovation in a specific school have produced significantly more encouraging results. (Similar effects can be noted in the field of industrial training, where courses based on the factory or firm are steadily beginning to replace the more traditional courses in special training centres.) The strategy of taking the learning opportunities to the individual institution, rather than withdrawing selected members of the institution to participate in special courses, offers further advantages. It opens up a more systematic possibility of adaptive innovation, in which the precise form in which a given change is implemented can be more effectively tailored to local circumstance. Moreover, it is in general likely to prove less costly and administratively simpler than the creation of a whole network of in-service institutes to which large numbers of teachers may have to travel substantial distances.

Finally, it may be useful to make more explicit a proposal which has been implicit in much of the earlier discussion: that provision for the continuing development of teachers' professional skills should be designed to offer positive incentives for active participation. It is both unrealistic and unreasonable to expect teachers to respond to in-service programmes, however excellent their quality, unless some compensation can be offered for the time sacrificed and the personal expenses incurred. But beyond this, if it can be seen that participants who themselves directly contribute to the success of such programmes (by developing through their agency a new degree of professional expertise, or by putting their result to practical use) are likely to qualify for special merit awards, it should be possible to anticipate a significant increase in the level of creativity throughout the teaching profession as a whole.

The teacher's professional autonomy

It may appear to some readers that the question of the recurrent education of teachers has been given undue emphasis. One purpose of the discussion which follows is to establish the central importance of this theme in any consideration of creative educational change; another is to explore its implications for the management of schools.

Education is no exception to the general rule that innovations do not simply happen: they have to be actively and consciously put into effect by those directly concerned with current practice. No planner, policy-maker or administrator, however clear-sighted and influential he may be, can bring about change by instant fiat, except in the rare case in which he is dealing with well-drilled automata. And since education is not a mechanistic but a complex human process, the institution of creative change - if it is to be genuine and not merely apparent - must ultimately involve the willing participation of those who actually operate the process: the practising classroom teachers.

If this chain of reasoning is correct, it follows that the best prospect for educational improvement lies in a teaching force whose members are sensitively aware of the individual and collective needs of the pupils in their charge, and who are capable in professional terms of ministering to those needs. Save in a few exceptionally gifted individuals, this sensitivity and capability have gradually to be acquired and developed over a substantial period of time: and their proper exploitation demands both a skilled practical understanding and the freedom to exercise it effectively.

An adequate provision for the continuing professional development of teachers is a response to the first of these demands. As the earlier discussion has suggested, in bringing about any significant change the existing skills of teachers may need to be strengthened and new skills acquired; and both will need to be put to practical use. But unless accompanied by a clear understanding of the purpose of such change, and an acceptance of its value, any in-service programme will remain at the level of mere rote learning, in which the results are incapable of being adapted to unfamiliar situations or transferred to novel contexts. Hence the importance which has to be placed on giving teachers the opportunity fully to assimilate novel ideas in terms of their own experience: that is, to be "educated" rather than simply "trained".

The second demand, for the freedom to exercise the understanding thus acquired, leads directly into the issue of professional autonomy. For once it is acknowledged that teachers should be capable of thinking and acting responsibly for themselves, the question must be asked how far they are given scope to do so in the context in which they work. A management system where decision-making is tightly controlled may leave so little room for the exercise of personal initiative as to neutralise altogether the effects of in-service education in the sense previously defined. Or to put the same point another way, if new opportunities are created for the continuing professional development of teachers, these opportunities will in turn generate a need to reappraise the management structure of education. Since this topic is

the subject of separate studies within the CERI Project on Creativity of the School, it will not be discussed in any detail here. It may be sufficient simply to note that the more responsibility in a professional sense those at the periphery of the system acquire, the more responsibility in a managerial sense they will feel rightly entitled to demand.

In effect, professional competence implies greater professional autonomy; and that in its turn may be seen to be closely interconnected with a whole series of structural changes involving a more participative governing system within the school, a greater degree of decentralisation of financial control, and a steady devolution of responsibility for policy-making from the central to the local level.

Professionalism in a broader perspective

The main concern has so far been with the role of the individual teacher in the process of bringing about educational innovation, and with the provision of professional incentives for him to carry out that role effectively. But of course creative opportunities are not necessarily limited to individual initiative; and, indeed, one of the most common stimuli for change lies in the prospect of participation in collective activity. No consideration of intrinsic incentives would therefore be complete without some discussion of how the teacher's sense of professional commitment may be enhanced by his seeing his work in a wider context than that provided by his own classroom.

One means of helping the teacher to acquire a broader perspective of this kind lies in giving him the opportunity to collaborate in some national or local development project. The beneficial effects of such collaboration may include not only that sense of external recognition of one's professional capabilities which an invitation to participate in a public innovation implies, but also the wider range of contacts which is opened up with colleagues in other schools, and the new opportunities which are afforded to improve professional skills. In seeing that his own problems and concerns are shared by others, the teacher is less inclined to feel a sense of isolation in his work; he is helped to have a better grasp of his own role and its significance; and in learning from the experience of his collaborators, he may more readily appreciate how best to overcome his own teaching difficulties.

But this type of external support is not of course the only available means of extending a teacher's perspective and developing in him a greater receptivity to innovative ideas. A more familiar and long-established mechanism for reducing the degree of isolation, and for giving him the opportunity to exchange ideas and experience with colleagues from other parts of the system, is provided by the professional teacher associations. Such associations (which may be distinguished from the teacher unions by their emphasis on teaching

as a profession rather than a career) are usually formed and run on a voluntary basis; and their membership is normally defined in terms of a specific subject area. Because they tend to bring together innovative minded teachers with an active interest in solving the pedagogic problems within their discipline, associations of this kind have often proved a potent force in curricular reform. For example, associations of mathematics teachers have themselves made major contributions to curriculum development programmes in France, the Netherlands and the United Kingdom; and the modern language associations and science teachers' associations have played a similarly active role in a number of countries. But besides providing this direct stimulus to collective innovation, many such bodies also offer, through their specialist publications, the necessary incentives for a creative individual to disseminate his ideas and test them against peer group experience, and to gain public recognition from his colleagues. Yet, as in other branches of the social services, voluntary agencies of this kind seldom attract public funding: and it may need to be considered whether a policy of financial support - however modest - from local or central funds would not pay substantial dividends in terms of improvements in the corporate morale and individual effectiveness of teachers.

So far, consideration has centred on means of extending the teacher's perspective on his work in terms of increased contact with his professional colleagues. But it is equally important for him to develop a clear understanding of the processes by which new educational policies are formulated which will affect him in his everyday activities, and of the underlying purpose of these policies. At present, the lines of communication in most systems between central administration - whether at the national or local level - and the individual classroom teacher are not only unidirectional, but poor. There is little opportunity for planning and policy-making to be informed by the real day-to-day concerns, or the first-hand practical experience of the professional in the field; and partly in consequence of this, the rationale and relevance of new policies may not be clearly apparent to those who are expected to implement them. Closer contacts between practitioners and policy-makers, though not easy to bring about, would substantially help to match new programmes to current needs and to help teachers to carry them through with a greater sense of conviction. Previous attempts to appoint teacher representatives to planning committees have appeared relatively ineffective. On the other hand (although much more expensive in time and effort) genuine exploration of professional views through extensive teacher consultation has proved an effective strategy for enlisting support for innovative policies, and a better mechanism for formulating those policies themselves.

Finally, the relevance of the inspectorate to this issue (of improving communications between teachers and administrators) must at least be noted here, although the topic is developed more fully in Chapter V. One of the inspector's most important roles, in the present climate of educational change, may prove to be that of mediator between the decision-maker in the centre of the system and the practitioner at its periphery.

6. CONCLUSIONS

Sections 5 and 6 have considered a number of ways of strengthening and extending the supporting structures that could enable teachers to realise their creative potential. In the following summary, the resultant recommendations are divided into two categories: structural changes which are largely dependent on factors external to the school; and changes affecting the school's internal structure.

a) External support strategies

- i) A systematic attempt should be made, in any review of teachers' salary structures, to relate financial considerations to major policy emphases. The administrative divisions concerned respectively with financial control and educational planning should for this purpose (as for others) be closely integrated.
- ii) The overall pattern of teachers' salaries should be periodically reviewed to ensure a reasonable balance between competitive entry scales and longer-term career incentives for those who have shown themselves capable of generating, or adapting to, creative change.
- iii) Within the overall salary structure, sufficient flexibility should be retained to allow for the possibility of a system of special merit awards related to the performance of specialised roles required by current innovation. The pattern of allocation of these merit awards should be dependent on the needs of the individual school. (See also (xiv) below.)
- iv) Given the increasing specialisation of role among experienced teachers implied by the introduction of merit awards, the possibility should be explored of introducing a wider range of supporting services to relieve professional staff of their more routine duties. Such support could include para-professional and volunteer classroom personnel as well as an increased provision of audio-visual, reprographic and secretarial facilities. (See also (xiii) below.)

- v) A greater concern with the qualitative improvement of educational provision implies a considerable expansion in the availability of programmes for the recurrent education of teachers. Where possible, such programmes should be system-wide, periodic and largely school based; and they should offer positive incentives (related to qualification for merit awards) for active teacher participation.
- vi) In systems adopting nationally or locally-based innovative projects as a major change strategy, the opportunity should be taken to maximise teacher participation on a collaborative basis.
- vii) Where policy changes are closely dependent on their acceptability to teachers and an informed professional understanding of their rationale, widespread consultation and discussion is likely to prove more effective than token teacher representation on policy-making bodies.
- viii) In promoting such discussion, consideration should be given to the possibility of selective financial support for professional journals in which innovative teachers can disseminate their ideas, as well as for voluntary professional associations showing a constructive concern with innovations in their own specialist areas.
- ix) The role of the inspectorate in mediating between classroom teachers and decision-makers should be strengthened, so as to improve the two-way communication flow between the centre of the system and its periphery.
- x) Communication of innovative ideas could also be enhanced by a scheme of interchangeable or shared appointments between the schools on the one hand and the inspectorate and teacher training institutions on the other.
- xi) Creative change within the educational system should be more widely publicised: in this process, the educational journalist can perform an important function. Official support for informed discussion of educational issues in the mass media should be strengthened by the increased provision of information relating to system-wide innovative policies and trends. (See also (xvii) below.)

b) Internal support strategies

- xii) Rather than seeking a general, across-the-board, increase in teaching resources, schools should be encouraged selectively to redeploy existing resources to support creative innovation, and in particular to provide incentives to key teachers to initiate or implement desirable changes.

- xiii) This process of selective redeployment of resources would be facilitated by giving schools a reasonable degree of autonomy in decision-making within the constraints of an overall ceiling of expenditure. There could, for example, be arrangements which gave schools the discretion to convert some elements of teacher salary costs into para-professional and other needed supporting services. (See also (iv) above.)
- xiv) Schools should, where possible, be given some responsibility, in association with the inspectorate, for the identification of the specialised professional skills required to meet their current innovative needs. Members of staff appointed to carry out tasks requiring these specialised skills should be eligible for special merit awards. (See also (iii) above.)
- xv) Teacher involvement in creative innovation is likely to be increased by an open climate for the discussion of pedagogic issues, a participative structure of internal school governance, and a greater degree of collective managerial responsibility.
- xvi) Innovative schools should see themselves as having a positive obligation to explain their practices to the immediate community which they serve, and in particular to the parents of their pupils. This should in turn help to improve the status and sense of professional competence of teachers and to enhance their scope for creative innovation.
- xvii) The increased provision of public information about school-based innovation should be supported by allowing parents a more open access to the school, by stimulating individual teachers to publish accounts of their work, and by the maintenance of regular contact with the local press. (See also (viii) and (xi) above.)

Chapter IV

CREATIVITY AND THE INTERNAL ORGANISATION OF THE SCHOOL

In this chapter we approach the heart of the matter - creativity as it affects what and how students learn. For though the school as an institution is the focus of this report, it would make little sense to consider its internal organisation except in relation to its function in making possible creative changes in the process of teaching and learning itself. Such changes can vary greatly in scope from a limited introduction of a short new sequence to illustrate a principle to a radical move to open-ended, enquiry-based learning. Though what is said in this chapter applies to all degrees of change it is particularly apposite to that now fairly widespread move towards a student based, open-ended learning which in itself encourages creativity in the student. Certainly the latter will not prove possible if the institutions in it and above all the teachers are not themselves creative.

For the teacher is the key figure: it is he who generates, adapts or adopts. Yet for him to do this is to put himself at risk; to exchange the comfortable security of known methods and often established relationships with their students for the considerable uncertainty of new ways. Indeed it is certain that such change will not only increase insecurity but materially add to their work load. If, then, they are to overcome these very real barriers they have to be stimulated, encouraged and supported - perhaps even pushed a little too! However, all of this has been considered in the previous chapter.

The first clear implication of these needs is that the individual teacher working alone in his classroom is an inappropriate unit. Rather, the small group of teachers with their group of students should be the basic unit of organisation. This is necessary both for interpersonal stimulation and essential mutual support. Such groups, which need not be stable over a long period, would be united by a common task but could be organised in many different ways, certain of which will be discussed briefly at the end of this chapter.

What we are mostly concerned with here, however, is the organisation within the school that generates these groups and enables them to function creatively, and also the more informal social relationships that can encourage or inhibit them. All organisations have

decision-making structures and for an organisation to be creative it is important not only that appropriate decisions should be made, but that the actual process of decision-making should itself encourage creativity. In particular it should encourage creativity among the small working groups of teachers.

1. THE PROBLEMS OF AUTONOMY

It is undeniable that creativity can exist only in situations that allow a certain degree of autonomy. What is less clear, however, is the relationship between the functions the school system serves in society and the degree of autonomy a school may have. From a comparison of highly centralised systems (in France, Finland, Sweden, Germany) and highly decentralised systems (in England, the United States, Switzerland) it appears that the functions served by the school by no means prevent it, in principle, from enjoying a considerable degree of institutional autonomy.

In countries with centralised educational systems, four arguments can be advanced for schools being granted relative autonomy. The first is that it is increasingly difficult for government in general, and the school administration authorities in particular, to deal with day-to-day situations arising in the community. In highly industrialised countries community life has become increasingly complex and differentiated while day-to-day decision-making involves an increasing variety of inter-connected factors. Enlightened problem-solving, therefore, calls for more detailed information and analysis of the sector concerned and a flexible approach to the special features of the problem area. A centralised administration, however, must first generalise from a particular situation and then take action which will tend to have universal applicability. It cannot, therefore, be sure of dealing adequately with day-to-day requirements on the spot.

The second reason for increasing autonomy concerns the relationship between administration and learning. Learning calls for individual efforts by teacher and learner, a personal identification with the purpose of learning and a self-generated motivation. This is particularly true when the purpose of learning is to develop a person's independence. Thus, there is the need to reconcile general teaching aims prescribed by a central authority with the practical interests and requirements of individual teachers and students. If learning processes are to be independent in this sense, there must be scope for autonomous decision and policy-making.

The third reason is partly dictated by reform strategies and concerns the organisational arrangements for carrying out reforms. Educational reform can only be successful if it is planned as a

continuous process in which those who organise learning processes in schools feel a personal commitment and devote their own efforts towards the reform. Implementation cannot be achieved simply by instructions from above; it depends on the activity and interest of people taking responsibility at ground level.

The fourth reason stems from the principle that a democratic educational ideal cannot be achieved in schools whose organisational pattern is largely imposed from outside. Democratic systems of participation are only meaningful if there are local areas of independent policy-making in which the participants can work. Participation without freedom from control would result in policy-making within the school which would be a formality having no real meaning, while freedom from control without participation would reduce the school's internal structure to an administrative hierarchy. Only by combining freedom from control with participation can one develop structures for action and decision-making responsive to a democratic conception of a school.

In countries with a centralised school system the objection is often raised that freedom from control may jeopardise the uniformity of the system, thereby affecting the students' freedom to move about the country. If uniformity refers to general objectives, to standards and equipment of schools, it certainly deserves support; if it refers to the detailed planning and design of schools and curriculum two points should be borne in mind. First, it is practically impossible to achieve a uniformity which does not handicap a student who moves from one class, or school, or place of residence to another. Even in highly centralised school systems, the personality of the teacher and the particular interests and wishes of the student inevitably mean that the value of instruction will vary from school to school and from class to class.

Secondly, it is not possible in principle to satisfy both the demand for uniformity and the increasing demand for more individualised instruction. Emphasis on equality of opportunity, interpreted as an opportunity for every individual to receive an education that will develop his particular potential and fulfil his special need, cannot be reconciled with uniformity in the school system. Thus, if schools have the autonomy and versatility to meet individual requirements, it should be able to meet the needs of the mobile student.

It seems clear, then, that schools can be creative only when they have at least a minimum amount of autonomy vis-a-vis their environment. Autonomy alone, however, is not a sufficient condition for creativity. Of more importance, is the extent that it is used by educational institutions.

2. SCHOOL ORGANISATION

The degree of autonomy to make decisions granted to the school and within the school to the teachers and students varies greatly within countries and between them. What is apparent is that some autonomy exists in most systems and that in many this is being increased. What is less clear is the relationship between autonomy and creativity, a complex problem that cannot be solved with simple concepts recipes or models.

One can, however, draw up a typology for differing models of internal school organisation and ask to what extent the different forms of formal organisation influence positively or negatively the creativity of the school. Four types of formal organisation at the school government level have been identified(1). These are: the authoritarian/bureaucratic, the consultative, the collegial, and the full participatory type.

Within the authoritarian/bureaucratic type decisions are taken automatically by the Principal; there is a hierarchic organisation of responsibilities and communication and rigid administrative procedures controlled by regulations.

Within the consultative type the power of decision-making remains with the Principal; but more is delegated and formal or informal procedures are set up for consultation with teachers and/or students and parents; administrative processes are controlled but open to negotiation.

Within the collegial type the power of decision-making is in the hands of the professional staff of teachers - perhaps with some student/parent consultation; the Principal functions mainly as an executive; administrative procedures are often less rigid and more open to challenge.

Within the full participatory type the power of decision-making is in the hands of staff, students, and perhaps parents. Administrative procedures are usually less rigid and more open to challenge.

Variations of these types of internal organisation are probably to be found in all Member countries, and for each type there will probably be some schools which can be regarded as thoroughly creative. Presumably one can state that none of these types of organisation entirely excludes creative schools, nor however does it necessarily produce them. As the participatory type has been tried in only a few experimental and progressive schools no general conclusions can be drawn as to its operation. On the other hand, general considerations

1) See "Organisation and Relationships Within the School", by Tim McMullen, Creativity of the School, OECD/CERI, 1973.

and experience make it reasonable to assume that the authoritarian type, while not necessarily ruling out creative behaviour in the school, will only allow it as a deviation from the natural trend.

The predominance of a consultative or collegial type depends on how strong the formal and actual position of the headmaster is to be. In case of conflict the consultative type has the disadvantage of relying entirely on the power of the headmaster; decision-making bodies in the school only become activated if he so desires, but whether this limitation hinders creativity is a matter for conjecture. A disadvantage of the collegial type is that decision-making is somewhat cumbersome and many day-to-day problems must be delegated to a small committee; the larger the teaching staff, the more inflexible is the system; and the more divided the teaching staff, the more difficult discussion and decision-making become.

3. THE HEADMASTER AND TEAM MANAGEMENT

Both the consultative and the collegial type of relationship between decision-making bodies and the headmaster reflect basically no more than different forms of a one-man management model. In theory this model can be contrasted with a team or group management model in which the headmaster's functions are split up and farmed out to different persons, but the decisions and responsibility are the team's as a whole.

An advantage of the one-man management model is its relatively straightforward allocation of responsibility. In particular, the clear division between the jurisdiction of the headmaster and other decision-making bodies in the school often strengthens these bodies, especially in smaller schools. On the other hand, the team management model has the advantage, especially in larger units, of being able to farm out the different jobs in the sub-divisions of the school (by grade, subject, subject area, etc.) among the different persons and link them together in a management board. The risk that an individual might be overstressed by the growing complexity and variety of his work could be easily countered by wider division of labour and co-operation.

Team management could have a relatively strong position in the school as it is easier to justify and keep check on extensions of management powers with a team. Meanwhile, the decision-making bodies could be relieved of many questions of detail and could concentrate on fundamentals. It should be stressed, however, that these arguments rest mainly on conjecture since the few experiments made with team management have not yet been properly analysed.

Two more general points regarding the function of headmaster or management team should also be stressed here. First, a headmaster is

at the intersection between the teaching and administrative systems, so that it is mainly he who has the task of mediating between various unrelated administrative requirements (e.g. regularity, discipline, effectiveness and economy) and the demands of the teaching system (e.g. spontaneity and uniqueness of situations). If he tries to evade any of these demands, he will be acting either only as a teacher or only as an administrator and the mediation will not be performed. In general, this mediation function is quite unavoidable and, if the headmaster does not perform it, other authorities and arrangements must be set up for doing so.

Secondly, because a headmaster has to act as a mediator, he should be relieved as far as possible from current routine work of a bureaucratic nature and should therefore have his own administrative staff to enable him to devote his time to more important work. The same applies to the decision-making bodies in the school which should be relieved of as many questions of detail as possible, whether organisational, financial or concerning staff matters.

In OECD countries, the headmaster's position is usually quite strong: this is the case in Belgium, the United Kingdom and the United States, and to some extent in Germany, Sweden and Switzerland, but in France it is a purely administrative post. In view of the generally strong position of headmasters one should ask how they are recruited. So far as can be ascertained, it is only in a few experimental and progressive schools that the headmaster is elected by the teaching body (who have the right to dismiss him or to limit the term of his appointment), and the practice of office rotation is rarer still. Nearly always the headmaster is selected and appointed by the governing board or by special (democratically elected) school authorities, but the main target of criticism is not so much this as the fact that a formal qualification (such as pre-service training) is not normally required. It is still generally believed that a good teacher and pedagogue will make a good headmaster and it is clear that other recruitment criteria have not yet been clearly established.

While Belgium and France provide only minor training programmes; in the United States boards of education sometimes stipulate a further training course together with a four-week in-service training once a year. There can be no doubt that this kind of pre-service and in-service training would most probably help to teach headmasters how to handle school administration better and more efficiently so as to have more time and energy for mediation, co-operation and communication activities. It sounds somewhat paradoxical, but creativity requires a certain amount of technical, indeed, almost technocratic rationality, if it is not to be dissipated in inexperienced, non-productive behaviour.

4. DECISION-MAKING BODIES IN THE SCHOOL

Along with the question of whether a given body in the school should have a large share in decision-making or should only be consultative, there is also the question of its membership. Here there seem to be conflicting aims. On the one hand it would be desirable for all teachers and others of comparable rank on the school staff to take part in the decision-making as they are all equally affected by resolutions or recommendations. Participation should also be sought for part-time teachers and non-teaching staff, as their own work also depends on what decisions are made. This holds true as well for students and parents in suitable proportions. On the other hand, the decision-making body must be able to work effectively and should not be turned into a mammoth show-piece.

In larger school units it will not be possible for one single body to achieve both these aims, namely the widest possible participation and a workable assembly. A representative assembly seems the most likely alternative, but here three problems should be kept in mind.

The first concerns the relationship between the members of the assembly and the groups they represent, especially the teaching body. As already discussed in connection with student self-government, every representative assembly carries the risk of estrangement between electors and elected and tends to break free from its constituents. Teachers, therefore, should take care that the meetings are properly prepared and that discussions and decision making are fully reported. Another danger to guard against is that the discussions and decisions of substance will be made in preparatory staff meetings, and that the school assembly, which will include representatives of the students and parents, will merely ratify prearranged decisions.

A second problem is what percentage of representation should be given to students and parents. The question of equal representation has been the subject of heated discussion in education policy circles in some member countries, first in connection with participation by assistants and students in university bodies and later in connection with membership in schools. Two main contrasting models, the parity model and the professional model, have been proposed.

In the strict parity model teachers, students, and parents work together on an equal footing, each group electing a third of the members to an assembly. The arguments in support of this model are often taken from studies and discussions on co-determination and democracy in industry and then simply transferred to problems of school organisation, but they ignore some important points. Unlike a dependent employer or an entrepreneur, a student or parent has no socio-economic basis giving rise to identifiable objective conflicts

of interest which call for organised and institutionalised representation. Representation for teachers', students' or parents' interests therefore usually means the organised expression of wishes and demands inspired mainly by educational and social policy, as well as the joint defence and assertion of legal positions and guarantees. Thus, the basic issue is not one of conflicting objective interests, but of questions and demands on which agreement could be reached by applying policy criteria independently of membership of a group inside a school. It would appear that some schools are already finding it impossible in practice to operate the equal-thirds model and decisive conflicts and discussions are taking place, not between groups in schools, but between individuals (thus cutting across the school groups), their ideas having been formed more or less voluntarily under the influence of political or other pressures.

The professional model puts the teachers in the centre of school policy-making. Because they are the only group who work full-time in a school and are especially trained for the job, they command a majority in the decision-making body. Meanwhile, the main purpose of students' and parents' participation is to enable them by institutional means to put forward their ideas and demands in an open discussion in the school and to defend and win legal rights and guarantees. How strong the students' and parents' minority representation should be cannot then be laid down conclusively, but remains to some extent an arbitrary decision.

The third problem is discussed by V. Iseibert-Jamati in a report on how governing boards operate in a few technical high schools in the Paris region. The report shows that in an assembly representing different groups the proceedings are usually distorted in two ways. First, there is relatively little discussion of questions of substance and relatively more of organisational and technical questions; secondly, most of the available discussion time is monopolised by professionals and especially by the office-holders. Nor do there appear to be any institutional arrangements capable of preventing these distortions. Instead it is clear that, if such assemblies are to function properly, the participants must be taught how to conduct them and it is to be hoped that instruction in this will not only be demanded, but will be facilitated and speeded up by the participatory process.

5. THE COMMUNICATION SYSTEM

An effective internal organisation of the school, whatever the exact nature, depends upon an elaborated communication network.

The function of a communication network is to ensure that a school's administrative organ knows what is happening in the teaching

sector and vice-versa. Everyone who is affected by a decision, but has no voice in it, should at least be informed of it and especially of the reasons for it. A valuable means of ensuring this would be, for example, to open all meetings of a school assembly to all members of the school.

The network should make use of both formal and informal methods. There are some which are apparently necessary but which have not proved very effective; examples are the full staff meeting (which tends to be too big and unwieldy) or circulars and leaflets (which are not read) or broadcast by an internal tannoy-system or even closed-circuit television (which soon loses its initial appeal). The network needs to pass on information mainly to manageable groups based on a small central committee of senior staff which would communicate with other small groups of teachers, but in that case the information should flow not only downwards but also upwards. The informal part of the communication network would consist of institutional arrangements for personal contacts, group discussions, coffee breaks and the like. When one asks what are the conditions for an information system, one is given mostly technical and technocratic answers; but it would seem that an information and communication system should be regarded much more as a question of human relationships involving close contacts and co-operation.

6. INFORMAL ORGANISATION

Teachers and students work not only within a formal organisation but also make up informal groups at many levels; these may be connected with activities or organisations outside the school. Such groups may have a very marked influence on the "atmosphere" within the school, the forms of behaviour and social relationships and thus on its "creativity". They may also act either to reinforce or reject decisions taken in the formal organisation.

These groups can be categorised as follows:

Grouping based on personal relationships or common interests. This could simply consist of those who live near each other, or those who have a common interest in games, or in foreign travel.

Grouping based on pedagogical grounds. This could embrace, say, "all the scientists", or "those believing in individual personal development".

Grouping based on professional status. This could be on differing legal status - in the United Kingdom those from universities as against those from teacher colleges; or it could be "young" teachers.

Grouping based on political or union interests. This might embrace those belonging actively to certain political movements or active in union interests.

In assessing creativity in relation to informal grouping one might ask the following questions:

Will various forms of informal grouping reinforce or negate "creative" decisions taken at different levels of the formal organisation?

Will these groups themselves initiate creative actions?

Will they tend to increase or decrease openness to outside stimuli?

Will they improve or harm relationships with the community?

Will they, by integrating or polarizing or cross-fertilizing between groups, increase or decrease the possibility of creative co-operative action?

Will they increase creative relationships between students and teachers or parents and teachers?

7. TEACHER PARTICIPATION

Research on organisations would suggest that the way in which teachers organise themselves informally has a great effect on how communication and co-operation develop in a school. There is no satisfactory answer to the question of what pattern of grouping is most common, nor to the question of what predominant pattern of grouping would have what effect on the creativity of the school. In general it appears that political groupings may be expected to be dominant in progressive schools, which may have special internal political tensions and wide outside contacts in the community. At the opposite extreme in traditional schools of long standing, the dominant grouping to be expected seems to be based purely on academic or personal factors. However, the question of whether a progressive school has brought about a political grouping or vice-versa and the corresponding question of whether a traditional school has brought about an academic or personal grouping or vice-versa cannot be answered. The danger in a school organised informally along political lines is certainly that confrontation and polarisation might in an extreme case paralyse the teaching body. A school organised informally on an academic or personal basis, on the other hand, might find itself inhibited by an over attention to curricular matters or by an attempt to maintain conciliatory personal relationships at the expense of challenging dialogue.

A further difficulty that can seriously prevent teachers from co-operating in formal and informal groups is the hierarchy imposed

on them and the rest of the school staff. Teachers are classified by the subjects and grades they teach and often by the type of school. There is further differentiation based on the type of teacher training received, on length of training, on date of appointment, type of appointment and number of hours of required teaching per week (ranging in France, for example, from 12 hours a week for secondary school teachers with the aggregation to 27 hours a week for primary school teachers).

Clearly this increasingly complicated differentiation and hierarchisation are incompatible with the development of school reforms which depend on the interest and support of all concerned. Experience has often shown that a "creative" egalitarianism and joint action may tend to be discouraged by the hierarchisation present in most school systems.

8. STUDENT PARTICIPATION

In considering ways for students to participate in discussions and decision-making at all levels in their school one should stress the interdependence between granting autonomy and granting participation rights. A participative system in which questions of practical relevance and interests are not discussed and decided will remain formal, superficial and frustrating. Three levels of student participation can be distinguished: curriculum level, the level of activities run by students, and the level of co-operation in the school's decision-making bodies.

It seems undeniable that there should be an area in which students acting on their own responsibility can choose problems and deal with them under their own procedures. There is a wide range of activities from music, drama and sport to literature, painting and play and on to research and politics on which student groups, task forces, and clubs can thrive. However, it is hard to assess what effect these activities have in motivating a student and making him creative or lethargic. Nor is it clear how the workability of a system of student self-government is affected by its type of organisation. In discussing principles to organise student self-government one can refer to two opposing models. One model stresses the use of the plebiscite and so goes back to soviet procedure and basic democratic theory, while the other operates more through representation and follows the theories of parliamentary democracy. The two approaches lead to different organisational models which may be outlined as follows: Stressing the use of the plebiscite would require plenary meetings of students to be held which would be vested with basic powers and would elect and dismiss the students' president, while the latter plus other

students would constitute the executive organ of the plenary meeting. On the other hand, operating through representation would mean setting up a central organ responsible for electing and dismissing the president who could be chosen either directly by a general election or indirectly by the student-spokesman for each class.

The scant experience which has been analysed suggests that neither the plebiscite model nor the representation model will work in its pure form. The plebiscite model overlooks the fact that student self-government cannot waste its strength trying amid serious conflict to create and mobilise a student electorate capable of action. Moreover apart from plenary meetings, which cannot be held every day without becoming boring and hollow, there must be a student body that can take action on day-to-day policy questions and it can only be organised on a representational basis. Meanwhile the representation model overlooks the constant danger that student self-government will lose touch with its base, the student body, by being continually absorbed in committees and conferences.

While it would be an oversimplification to describe plenary meetings as the panacea for activating and mobilising students, a self-government system stands or falls depending on whether there is the closest possible interrelationship between the student body and its representatives, so that it requires the use of the plebiscite. Some member countries, fearing that their students might be politicised by demagogues, have banned or severely restricted the use of plebiscites with the unintended result, it appears, that they have usually been landed with uninterested and lethargic students and student representatives. It also seems undeniable that, in addition to running a number of activities themselves, students should be given the right to take part in school conferences and management.

Three kinds of political structures can be suggested which broaden the participating of students in school decision-making. The first is the representative bicameral system in which two bodies constitute the whole. The students select a student senate and the faculty selects a faculty senate. Policy issues are decided upon separately in each body and then are brought to a linking group for action. The linking group (often called an executive committee or a steering committee) is convened by the principal and has as members students and teachers from their respective senates. This linking group implements policy and integrates it into the daily functioning of the school.

Another model is the representative unicameral system; a single body is formed to represent all of the various groups in the school. Such a governing body typically is kept small so that decision-making is not too cumbersome. Sometimes an executive committee is created out of the larger body to manage administrative details.

A third governance model is the town meeting, in which everyone in the school attends and decisions are made by the entire group. The town meeting is best implemented in small and informal organisations; many American alternative schools use it and it is often used within such sub-systems of larger, more formal schools as learning groups, units or houses.

It has been noted that in any sort of school government, all members of the school should have formal opportunities to communicate with members of the governing board. Often a useful technique has been to arrange the governing board in the centre of a large room with the school participants seated around them, in the form of a theatre-in-the-round. An empty chair or two can be placed in the centre circle so that anyone can sit with the governing board for interaction. Hearings can be held so that all participants have a chance to express their views and listen to the views of others. Also, some type of diagnostic instrument is often employed to survey opinions and feelings of the school's membership. In the final analysis the strength of any school governing body is related to how closely it remains in interaction with its constituency.

9. PARENT PARTICIPATION

The issue of parent participation discloses the paradox that although the school and the home work together in socialising every student, their co-operation can seldom be said to reflect common interests nor do they have an institutional basis. On the contrary, there would appear to be a danger that the dichotomy between what the school and the home expect of the student may be increasing. A main reason for this is that the different socialising functions performed by the school and the home are becoming more interlocked. Such scope as there was for separating what a student does at school from what he does outside it is diminishing, while the school's role in socialising him claims more of his time and has increasingly taken over what were formerly family responsibilities. In addition, both the school and the home have to cope with relatively new factors that are having a growing influence on the socialisation process. The powerful influence of the mass media, whose offers and attractions impinge on students almost without limit, has created new problems to be dealt with - both in the school and at home.

There are underlying factors in the conflict between school and home which can perhaps be mitigated by new forms of co-operation, since social and cultural differences are partly responsible. In general one still has to assume that schools and their teaching staffs follow the traditions, values and conduct of a social class different

from that of many students and parents. The school and the home carry a joint responsibility for the process of socialising pupils. However, the expectations the school and the home have concerning a pupil may diverge and it is important that the negative aspects of conflicting demands from school and home are minimised. Schools have tended to deal with this problem often by pretending it did not exist, and by assuming for themselves a superior attitude vis-a-vis parents. Parents were expected to take a non-committal or often uncomprehending attitude towards structural and curricular reforms. However, if the aim is a coherent socialising process it would be better to have clear definitions of both the functions and forms of parent participation and the limits of the role the school can play most appropriately.

First, an extension of parent participation should bring about improved communication and co-operation between home and school. Multi-level contacts seem more important than top-level contacts between chosen representatives of parents, school management and teachers. Parents' representatives do indeed play their part at school meetings, but they are not the key to the problem. Rather, the reason why widespread contacts are so important is that relations between parents and schools do not involve negotiations over abstract interests, but the resolution of specific conflicts between the expectations, conceptions and attitudes of certain parents on the one hand and certain schools and teachers on the other. While some typical disagreements and problems can be generalised, they can only be clarified by adequate knowledge of the background of the individual student concerned.

Secondly, lack of information is a problem. Tension between school and home increases when schools and curricula keep changing, and parents, who are often ill-informed about curricular and structural reforms in a school, judge it only by the yardstick of their own school experience. However, the required exchange of information is not one-way; it involves not only advice by teachers to parents, but also a reverse flow of information to teachers on the child's behaviour out of school and on his or her home - in other words, advice by parents to teachers.

Such parent participation might be institutionalised in many different ways, but one can hardly predict how they would operate. Quite general suggestions include: opportunities for visiting classes and discussing the curriculum with the teachers; information evenings and parents' seminars on particular subjects or sets of subjects; a jointly run information service; regular meeting places inside and outside the school and the use of parents as "paraprofessionals", doing a variety of jobs from clerical work (keeping attendance records, typing, mimeographing) to serving as instructional aids - managing the library, the media centre and so on.

More extensive attempts to develop co-operation and communication between school and parents come up against a major problem, namely the time factor, which has relevance for those parents who are employed. There is thus the risk that only parents without an occupation would bother about the school, finding it a kind of substitute for paid or other kinds of development. While such a development might be of value to the parent concerned and also to the school, it would not solve the problem of parent participation, but merely involve a rather atypical group.

10. SOCIAL RELATIONSHIPS

Apart from participation by teachers, students and parents, there is an area of interaction in schools that greatly affects the general atmosphere and the spirit in which people get along together. This is in the area of social relationships, which is very difficult to define and is not easily brought under organisational arrangement. It includes things such as the availability of premises or even a single room in which one can talk in small spontaneous groups (without first having to ask whether there is a room free and then having to reserve it); or of a television set (when there is an important broadcast); and so on. These may, of course, be available only if there is enough money, but their importance to the success of a school should not be underestimated. The development of social relationships also implies the opening up of a school to its environment, the local community and other educational establishments. This again raises the question of the offset of full-time schooling on the creativity of a school, since full-time schooling means spending more time together, a necessary pre-condition for learning and trying out new forms of communication and political and social behaviour. It is observed in all OECD countries that the youth sub-culture has become more pronounced and has often led to the rejection of traditional processes of working and learning. The trend towards opening up schools to their environment, making schooling full-time and setting up education centres is not without its problems, because it is often accompanied by a trend towards ever larger school units and building complexes and towards widening the range of educational and training courses and absorbing an ever-increasing number of disparate persons. Indeed, one can hardly say what is the optimum size for a school that aspires to be called creative. What is certain is that too large a school, i.e. too large a teaching staff and student body, will make communication more difficult within and between groups of persons, unless it can be broken down successfully into sub-units. The answer probably lies not in the happy medium (which experience shows it

seldom does) but a combination of small manageable units forming larger school complexes, or in breaking down large centres into sub-units of a sensible size.

In describing the current tendency to change institutional practices one should start with the gradually declining importance of formal teacher-based instruction in favour of group studies and team teaching. It must be remembered, however, that by planning curricula on a co-operative basis so that binding decisions are taken on their objectives and content and also on working methods and modes of interaction, one will be instituting group co-operation in a field formerly recognised as one in which a teacher had full authority within his own classroom. Replacing this individual pedagogic freedom by group decision-making processes is a trend not without its problems in view of the clash between individual and collective liberties. This does not mean, however, that such a division of labour will abolish a teacher's personal responsibility and commitment or make them superfluous. On the contrary, co-operative processes can only succeed if those concerned contribute or acquire as individuals the necessary abilities and personal commitment to work effectively in a group.

There is a number of innovative arrangements for teachers which call for increased interaction among staff members on professional matters. This interaction can be facilitated in two ways:

Collegial Supervision. Collegial supervision is an organised procedure through which professional peers - instead of higher-status administrators - are responsible for monitoring each other's professional behaviour. It is based on the assumption that professional peers can help one another to improve, especially if they are given some skills of analysing instruction and giving constructive feedback. The process is most effective when there is administrative support and time is allowed for teachers to work together, but small groups of teachers can meet informally to improve their teaching or explore new curricula even if little formal support is offered in the school. Within both such groups, teachers set their own goals, procedures, and methods for evaluating what they do.

Formal Staff Sharing. In many schools, the backgrounds, special skills, and interests of the teaching staff are insufficiently publicised and shared. An English teacher who has a non-reader in class, for example, may in desperation call in an outside consultant, read up on techniques in remedial reading, or continue to plod through with the problem. In many schools, however, there is somebody with the skills to help a teacher with a non-reader, but quite often such resources remain unknown and unused.

Of the possible institutional arrangements for changing the interaction between student and teacher, one thinks first of institutionalising student participation in the planning of curricula

(i.e. in selecting objectives, content, media and methods) and providing feedback as their instruction proceeds. Already, on an informal basis many teachers do consult their students in the planning of their curriculum and encourage them to be critical. What is proposed here is that institutionalising this criticism will create a dialogue between teachers and students that can improve the learning process. Discussion and revision of the curriculum could occur at regular intervals. An approach that focuses on solving particular problems or issues is to be preferred because it will prevent excessive institutionalising and formalising which, however well intentioned, will stifle spontaneity with too much regimentation.

There are many innovative institutional arrangements that can increase the influence students have on their educational programme. Much informal influence and learning already goes on between peer groups in schools. These informal interactions could be made formal, however, and with training and guidance students could teach same-age or different-age peers the formal curriculum or could develop and teach subjects not covered by the formal curriculum of the school. Putting students together in tutoring pairs can also be an effective way of raising interest and achievement.

Several organisational arrangements can be tried to encourage and allow students to work together on a formal basis. Teachers can assure that students who need help will receive it on a regular basis from other students skilled in the problem subject. Formal student tutoring services can be organised to serve as an information centre and clearing house. Informal discussions can be held during free hours or study periods on particular problems or questions of interest arising from classroom activities.

One disadvantage of age-graded schools is that youngsters have little opportunity to interact formally with younger or older students. Two programmes have been implemented to change this situation in the United States using formalised cross-age tutoring. A programme by Fleming (1969) involved an entire fifth grade class tutoring an entire class of second-graders. Two or three times a week for approximately a half hour, students chose their own partners and structured their time as they wished. Teachers were also present as resource personnel as needed, but the tutors received little actual training. Logs were kept of the activities, and Fleming reports that the programme worked out very well.

The second programme, by Lippitt and Lohman (1965), included a more extensive training programme for the tutors and was initiated because many of the upper-grade students felt negatively about school. A deliberate attempt was made, in fact, to draft some of the most defiant students as tutors. The first group of tutors consisted of fourth and sixth graders who held high friendship and influence status

in their classroom peer groups. Lippitt and Lohman believed that the tutoring programme would have a better chance of achieving success if influential peers first had favourable experiences in the programme.

The tutors met for a series of training sessions on how to help others to learn; they also set their goals and instructional strategies during these sessions. Teachers chose the tutoring pairs and also scheduled their meeting times. All of the tutors would come together at regular times several times a week to discuss techniques and problems and to exchange ideas. These discussions typically were convened by the teachers, but the tutors did most of the talking. The teacher reported an increase in co-operation among the older students and an increased motivation to pursue academic work on the part of most students.

A third organisational arrangement is the development of mini-courses based on interest and the availability of skills. They can be convened by students, teachers, the headmaster, parents or other interested persons. The arrangements can be simple or complex: one afternoon per week can be set aside for teaching a variety of mini-courses, or much of the regular curriculum can be made up of such courses, meeting for different lengths of time. A committee of students and teachers (or perhaps a student committee with a teacher-adviser) can hold the responsibility for determining what courses will be taught, assigning teachers to the courses, and determining the logistics of scheduling. Groups vary in interest from learning how to repair bicycles, to playing the guitar, to studying the history of the Roman Empire. Some of the mini-courses might require the resources of an expert, while others could merely have student conveners and hold discussions of mutual interest and concern. Such procedures have worked successfully in a variety of American schools.

Finally, for experimental purposes, Schmuck has proposed a school organisation consisting primarily of three different learning settings. Each student and faculty member would spend time in a group focused on guidelines or personal growth, in groups orientated towards academic and intellectual development, and in other groups which aim to help students apply and use their knowledge. These three types are referred to as the guidance group, the instructional group, and the application group. This sort of organisational arrangement should be tested.

11. CONCLUSIONS

This chapter has shown that it is probably easier to identify that which is inimical to creativity than that which is positive. Conclusions that may be put forward are necessarily tentative, nevertheless it seems that certain points in particular are worth emphasising:

- 1) Real basis creativity must exist at the level of learning and teaching: the basic organisation conducive to this is probably not the individual teacher and his/her class but a small group of teachers and their students co-operating to achieve a common task;
- ii) The task of a school organisation in order to be 'creative' is to take and implement decisions that will stimulate and support the creative actions of the basic 'small group';
- iii) For these decisions to be both informed and acceptable they should be taken with the participation of, or after consultation with, those affected by them;
- iv) Several possible styles of organisation are possible and no conclusions can be drawn as to the most effective; however, in all of them the Principal - or the chief executive in a participating system - will be a key figure. It is essential that he/she should receive both initial training and regular in-service 'refreshment'. This does not, however, exclude the same need for elected or 'voluntary' chief executives.
- v) The wise taking of decisions, their implementation and the transmission of stimulation and encouragement depend on a free-flowing, two-way communication system, both formal and informal;
- vi) The informal grouping that exists among staff based on common political, professional, or personal interest can result in climates of opinion that are hostile or positive towards 'creative' change. It is wise for an organisation to discourage the one and encourage the other;
- vii) The nature of the organisation and the style of social relationships that accompany it act as a powerful hidden curriculum for students. This fact must inform the choice of organisation.

Chapter V

THE ROLE OF THE INSPECTORATE

1. INTRODUCTION

Many educational systems include an inspectorate, whose role and responsibilities are frequently referred to and even questioned when problems of educational innovation are dealt with. Teachers see national or regional inspectorates in a variety of different lights: as a buffer state between the ministry and the schools; as a vaguely menacing and authoritarian control on overall educational results and individual teacher performance; or as a potentially helpful source of dispassionate advice and information. In those many educational systems which include an inspectorate, all three roles are combined, but the emphasis on each changes with the specific historical and cultural background of the area. These apparent contradictions in the roles and relationship of the inspectorate to the teaching force come most visibly to the surface when educational innovation is under discussion.

Schools, like all other social institutions, today face powerful social and economic pressures, both internal and external. From outside come the (fast-changing) constraints of public administration and accountability, from within the equally fluid demand for new directions indicated by educational research, the attitudes and aspirations of the pupils themselves, and the teachers' own view of their professional function and working conditions. The synthesis of these separate drives is innovation.

Finding an appropriate response to these pressures is difficult to conceive without a permanent, flexible and accessible mechanism co-ordinating the work of the various bodies concerned and inviting their intervention at all stages of the education process. It is clear that this awareness of new situations and potential problems and the desire to provide suitable solutions are indispensable, above all, at school level.

It is the school which stands at the very centre of the exercise. It is during the teaching/learning process that attempts at innovation must find effective expression, must be tested against practical

reality. For any educational system that sets out to train its pupils to cope with change, new ideas, and the increasing demand for social awareness and flexibility, the concept of creativity in the school itself is a pivotal one; it passes down to the operational level the task of adopting, adapting or rejecting innovation, and more importantly, that of suggesting and promoting it.

Thus, the aim is to foster the school's capacity to react thoughtfully and creatively to new techniques and situations, and consequently to provide learning situations for the pupil that will add to his individual knowledge, skills, personal awareness and abilities to understand and deal effectively with his environment.

The successful achievement of this aim, however, depends on:

- the interplay of all the factors involved in the internal working of the school, particularly those relating to the attitudes of participants, the pattern of the relations established between them in the school, the circulation of information between the participants and the exchanges between the school itself and its environment;
- the institutional framework consisting of the authorities responsible in various respects for the working of the educational system as seen in their dual relationship to the school and the world at large.

The central question is whether the inspectorate contributes to the development of the creativity of the school. Since the educational systems of Member countries vary in, for example, their degree of centralisation and the manner in which responsibility is distributed, and since the functions of the inspectorate will reflect these differences, it might appear that the answer to the question posed is best sought through case studies of different systems. However, a more thorough analysis of the role and activities of the inspectorate, in the light of the approaches, methods and objectives adopted, reveals lines of convergence that indeed go beyond the institutional framework in which these services operate. These points of similarity are interesting since they can serve to emphasise the meaning of a trend and focus on the essential issues. This chapter will be concerned more with points of similarity, with common problems, and with proposals for action applicable to different kinds of educational systems, than with the unique features and idiosyncracies of any one system.

The role of the inspectorate is everywhere changing. In part it is determined by the nature of the administrative structure of a country. In the more decentralised countries, for example, it may serve as a horizontal link discussing and disseminating a variety of new developments between schools, while in the more centralised countries new developments may be disseminated more rapidly and

extensively by an inspectorate acting through ministerial decree. Again, in some countries (such as the United Kingdom) local authorities may also employ inspectors whose role and functions must be distinguished from those exercised by the inspectors employed by the central governments.

In spite of the close dependence of role definition on the structural features of the particular system or sub-system in which inspectors are working, there is a variety of factors that influence the performance of their duties. During the second stage of the project on Creativity of the School, the inspectors themselves confronted those features of their countries' educational systems that constrain or influence their role. They also considered proposals and possibilities for weakening the historical and cultural determinism which is applied by the acceptance of these constraints. First, was noted the impossibility of wholly abstracting their diffuse and complex roles from the particular concepts of the national system in which they are exercised. Secondly, a great deal of interest was shown by the inspectors themselves in defining a kind of cross-national profile of "the good inspector". Thirdly, considerable efforts are being made by the inspectorate in several systems to redefine their role, taking on new and very demanding responsibilities. At times throughout the study, when emphasis was given to the difficulties encountered in the performance of their duties, inspectors adverted to the force of history and of tradition, the power of the central administration, or the expectations, assumptions and indeed the limitations of teachers, and to financial restrictions. On the other hand, the attempt to build up a profile of the qualities of the good inspector together with the emphasis on careful selection, orientation and training, and a broadly defined, creative role, suggested a belief that these limitations and constraints might be to some extent transcended.

2. THE INSPECTORATE AS A MEDIATING AGENCY

One function of the inspectorate appears to be common in both centralised and decentralised education systems. This is "to keep directly in touch with the two decision-making bodies, the school and the educational authority, and to participate in their work without being a component of either of the two decision-making and management structures". The inspectorate cannot expect to play an active part in developing the capacity of the school to deal with change unless it has the capacity to maintain this link. However, the role of the go-between is ambiguous and uncertain. On the one hand, it is necessary to maintain a degree of independence from the school and from the administrative hierarchy. On the other, it is

only by engaging in the affairs of the school that the inspector can hope to gain the insight and understanding necessary to give appropriate support. If this support is to be effective and realistic, however, the inspector must help the school to remain in close touch with the administrative structure. No firm conclusions were reached by the inspectors themselves on the precise balance to be drawn between such engagement and detachment, but it was agreed that in the changes currently taking place from a primarily controlling to a primarily supporting role, the inspectorates in all systems need to rethink the part they can play in the linkage between school and administration.

An opportunity now exists for the inspectorate to participate both in the school's daily activity and in educational policy-making at the highest national level. Thus, the needs of the school with regard to support structures, resources, inspiration and guidance may be transmitted to the administration, and the parameters and restraints of national policy in turn communicated to the schools. However, it is not at all clear that inspectors as a body are adequately prepared for performing this linkage role or that the specific tasks and problems of linkage have been analysed in the kind of detail that is necessary, given the rate of educational change in Member countries. Practical adaptations and responses can be documented from any system; there is little evidence, however, of anything resembling a challenge to existing institutional systems. It may be questioned whether, in playing what appears to be such a recessive role, the inspectorate has taken advantage of the opportunities available to it to foster and stimulate change, as distinct from supporting the government's conception of the directions in which change might take place. Of course, exceptions can be noted; for example, the initiatives taken by local advisers in the reform of primary education in Great Britain. The evidence presented in the course of the Creativity of the School study suggests, however, that on the whole, the distinct advantage the inspectorate enjoys as a linkage mechanism has yet to be fully explored or exploited. A closer analysis of the role expectation and role performance of the inspectorate discloses some of the reasons for this state of affairs.

3. CONTROL AND GUIDANCE ROLES

Role expectations and role performance differ, of course, in different educational systems. Nevertheless, in all the education systems represented in this study, most members of the inspectorate perform a wide range of roles, including supervision, control, tendering advice, dissemination of information and promotion of change.

Very often the advice and control/supervision roles are seen as incompatible by teachers, if not so often by the inspectors themselves. Such incompatibility is likely to occur when the purpose of control/supervision is defined primarily as investigating the work carried out in the school, evaluating the work of individual teachers for purposes of promotion, and ensuring that their work conforms to the general directives of the educational authorities. While this role appears to be changing, it is widely believed by the inspectorate that control and supervision are necessary duties to be performed. That control and supervision can be constructive and should be maintained was generally agreed, provided they become less authoritarian and focus more on the school as an institution rather than on the individual teacher.

To develop the creative potential of the school, control and supervision ought to be linked strongly with evaluation and advice, as any initiative towards change must first be based on an evaluation of the existing situation. A reconsideration of the role of control and supervision in this sense may contribute to the process of upgrading the capacity of the school to deal with change. It is important to bear in mind, however, the requirements of different systems in formulating generalisations about control and guidance roles. This point underlies the analysis made for the Project by Mr. Jose Costa Ribes of the Spanish Ministry of Education and Science, who sees the reconciliation of the incompatibles as a matter in which the inspector himself has a major part to play:

"The most specific and characteristic functions of the inspectorate are, however, still those of control and guidance. A large part of the time available is devoted to them, although there is now a general tendency to allot priority to guidance over purely custodial control. In fact, during the last three years the activities of the inspectorate, especially at the basic level, have been practically confined to the dissemination and gradual consolidation of the innovations foreshadowed in the new educational order. This dissemination effort has been extremely effective, and has greatly helped to promote a favourable attitude to these new educational principles among teachers and to lay the foundations of co-operation between inspectors and teachers, which will be most useful in the future.

The balance between the functions of control and guidance, which are thought in many quarters to be incompatible, largely depends on the inspector himself.... We believe the risks of investing the two in the same person will always be less than the risks of allotting them to two different people, with the differences of opinion and divergent if not opposite points of view that this

would inevitably imply. To forgo entirely the control functions would be counter-productive and dangerous, unless we could rely on a certain stage of educational development, and certain qualities among the teaching staff, which cannot at present be taken for granted in our country."

If this control is to be constructive, and complementary to guidance and advice, it must inevitably comply with certain requirements:

- a) the rules must be sufficiently flexible to be adapted to varied circumstances;
- b) the teaching staff must enjoy a sufficient degree of autonomy for the full exercise of their functions;
- c) the teacher's professional life must not be cramped as a result of this control, which should always be of a distinctly subjective nature;
- d) the person in charge must be imbued with the idea that there is no such thing as accepted pedagogic dogma, and that no methods are wholly good or wholly bad;
- e) the control function must not be separated or performed independently of the guidance function.

4. THE INSPECTORATE: RECRUITMENT AND TRAINING

If inspectors themselves are not playing a creative role, are not sufficiently engaged in the support of the school level creativity, it might be asked if this is because they are not yet fully professionalised, not fully in possession of the skills potentially available to them.

A wide measure of agreement was reached in discussion about the qualities needed by an innovative inspector. These qualities were summed up in the report of some of the participating groups:

1. A rich personality, a good mind, a sense of judgement, a sense of human contact and relationships, natural warmth, a sense of responsibility, great open-mindedness, flexibility, an aptitude for education and persuasion.
2. Great competence in the subject inspected.
3. Practical teaching experience at the level on which the candidate is to inspect.
4. A variety of experiences besides teaching, involving responsibilities and a variety of human contacts.
5. Sufficient knowledge, not only of the educational system in his own country (which is self-evident) but also of other educational systems.

The crucial elements in this profile of an inspector are: personality, professional competence, relevant experience and advisory skill. It is far easier, however, to agree on a profile than it is to decide what this implies for recruitment methods, the organisation of the inspector's work, and for initial training and in-service training policies. The profile is not particularly helpful so long as it remains at the level of generalised description. Nevertheless, it does pose some interesting problems. The personality variables which were identified suggest criteria for selection boards and possibly for those responsible for organising training programmes. However, no evidence was presented to suggest that these criteria are being used in any systematic way. How much is the initial selection of the inspectorate still a matter of tradition, and is the identification of personality variables in any way a scientific process.

The continuing credibility of the inspectorates as one of the major partners in a co-operative system of planned educational change rests in part upon the elimination of archaic and ad hoc forms of recruitment and training. In a period when teaching is becoming increasingly professionalised and when greater attention than ever before is being given to the careful selection, initial and post-experience training of teachers, it is paradoxical that comparable standards of selection and training do not prevail within the inspectorate itself. Thus, the enthusiasm displayed by the inspectors for gradually transforming a control role to one of guidance may not be matched by their capacity to act as leaders and supporters of change. The challenge to inspectors was summarised by Dr. Michael Birchenough of the Inner London Education Authority in these words:

"Teachers are faced with the problem of finding methods and materials for teaching the different elements of the curriculum in a way which is appropriate to the needs of their particular pupils. This sometimes involves adapting an approach which has resulted from a nationally developed scheme. However, in countries where syllabuses are not determined centrally, teachers are increasingly carrying out local curriculum development and often devising new methods and materials which show considerable originality. In this they can be greatly helped by inspectors and advisers appointed by a local authority, who cannot only contribute personally to the work, but can see that the teachers get the facilities and time needed to carry out the work of curriculum development. Inspectors appointed by central government naturally have an important part to play in national curriculum projects, both in helping to organise the projects and in seeing that their results are disseminated to the schools"

Since particular interest was expressed in the inspectors' meeting, both in the structure of the inspectorate and in the scope

of the role it performs, it is worth considering these points in greater detail. In a statement prepared by the British Department of Education and Science, a comprehensive role for the inspectorate emerges:

"Most of HM Inspectorate's duties imply a collective group or team approach rather than individual authority. The inspectorate is shaped into a well-balanced body covering every aspect of education and incorporating different kinds of expertise and widely varying experience. The training which an inspector receives after appointment and the teamwork which his role imposes on him lead generally to the adoption of a broad view of the educational scene. Nevertheless the inspectorate is composed of individuals who have specialised in particular aspects of education and thus its members continue to regard themselves and work as specialists. It is likely therefore that their views at least in regard to those aspects of education in which they specialise, will be held with some conviction. They will be moved in that case to use all opportunities legitimately open to them to convince others of what they feel to be right. Within the educational world they will not simply be regarded as an instrument of others but as authorities with a competence backed by knowledge and experience. It is because the whole educational system is continuously under the observation of the inspectorate that its collective views on desirable developments within the system are important. Teams of inspectors give particular attention to promising creative enterprises within the schools and outside them. On the basis of these judgments fresh resources can be made available to support developments from which improved educational achievement can be foreseen. It is never likely that resources will be sufficient for the simultaneous realisation of costly development plans throughout the whole system. Priorities generally have to be decided and estimates drawn up of the consequences resulting from alternative choices. Consultations with representatives of all parties concerned and expert opinion drawn from several sources are also involved. Regional variations which might influence the effective execution of a national plan have to be considered. All these proceedings are inherently necessary to the planning process and the inspectorate is expected to engage in them all. It is not the only source of information and advice at the disposal of the planners, but it is certainly a source to which major importance is attached. Planned intervention by the central government would hardly be possible without its own professional field force".

This statement sets a very high standard against which the performance of inspectorates might be measured. Just what are the methods that are adopted for recruiting, selecting, training, re-training and generally supporting the work of those "professional field forces"? Selection, by general consent, falls well short of the ideal. Training programmes vary: although in many countries initial training is often given to inspectors of elementary education after competitive recruitment, there is nothing comparable for secondary education except in the United Kingdom where new inspectors undergo a year's apprenticeship with an experienced inspector. Practical initial training, for such a variety of new roles as the inspectors have assigned to them, is clearly necessary. Part of this training should be provided on the job but this would not be sufficient any more than it is now sufficient to train entrants to the teaching profession on the job. A new inspector should be given the opportunity to strengthen his knowledge and skills in those areas for which his previous training and experience have not prepared him. He needs the opportunity to rethink his knowledge and experience, to acquaint himself with current research, theory and practical endeavours in the fields into which he is entering, and to acquire those competencies without which he cannot contribute effectively to educational innovation. Equally, he needs opportunities, throughout his career, to free himself from current duties and to undertake in-service training.

Training and retraining courses which have as one of their foci the development of competence in relation to creativity of the school must involve agencies other than the inspectorate itself. A number of suggestions were made in the course of the project:

- self-assessment and self-directed learning;
- study groups;
- group work including participation in team research;
- development projects at the local, regional and national levels;
- secondment to particular institutions or to specialised duties, e.g. in teacher training institutions;
- sabbaticals;
- international exchanges.

The main point of these proposals is to ensure a continuing engagement by inspectors in a variety of programmes and projects associated with local, national and international educational developments. The intellectual vitality and the practical effectiveness of the inspectors in supporting and guiding activities at the school level require that they maintain a wide range of contacts and submit their work to continuing appraisal by themselves and by other groups and agencies. It was agreed that a programme for the

exchange of inspectors among OECD countries is one highly useful and practical element in a scheme of staff and system development. However, it would be a mistake to confine this type of exchange to members of the inspectorate. The distinctive role inspectors perform as part of the linkage system, and the demands placed upon them to support innovation at the local, regional and national levels suggest that inter-professional contacts are at least as important as purely professional exchanges.

5. WAYS OF CONTRIBUTING TO THE SCHOOL'S CAPACITY FOR CHANGE

Bearing in mind the need to relate all general proposals to the particular historical and cultural circumstances of Member countries, the inspectorates have a vital part to play in contributing to the schools' capacity for change. This contribution may be summarised as:

- i) providing a general channel of communication between the administration and the schools;
- ii) participating in initial teacher training;
- iii) participating in in-service teacher training;
- iv) participating in the development of the curriculum and in teaching/learning processes;
- v) fostering and supporting innovations in school management and organisation;
- vi) encouraging a wider role for the school in community development and social and cultural change.

Each of these points could be elaborated at length. However, in this report only a brief summary of main findings and recommendations is presented. There is, in any case, need for a much fuller and more detailed analysis of how these functions might best be performed than was possible within the limits of the project.

1) Providing a channel of communication

Every contact with schools gives the inspector an opportunity to hear about the problems at issue, to try to define and clarify them with the persons concerned, to set them in the wider context of the school system and the administration, and to help to find possible solutions. The inspector thus provides a permanent, two-way link between the school institutions and the appropriate authorities. He may collect and transmit to the authorities and services concerned, relevant information on:

- the pupils, their needs, aspirations, behaviour and the way in which they receive instruction;
- the teachers, their training, capabilities, difficulties and needs;

- the teaching and educational activities undertaken - by subject or groups of subjects - and requirements for putting them into effect;
- the innovations proposed in the school context and their requirements.

From higher levels of authority, the inspector can convey information to schools and teachers on the approaches that have been decided upon and the innovations envisaged. This information should not necessarily be in the form of guidelines; it is meant to be much broader and includes advice, explanation and discussion; in general a sharing of ideas and the promotion of a dialogue with all those whose assistance is necessary to enable creative action to be taken (the school head, the teaching staff, parents and students). The same people should also participate in following up the implementation of a project or programmes and assessing results. This feedback of key information is an important aspect of the functions of the inspectorate.

This vertical, two-way movement of information should be combined with the equally important horizontal dissemination of information between schools or teachers at the same level. Here the inspector is, in many systems, the best and most effective source of dissemination because of the wide range of his own knowledge, the analytical and comparative data he can provide, and the absence of adequate structures and channels internal to the teaching profession itself.

The circumstances in which information is transmitted and received are as important as its content. How the task of conveying it can be carried out most effectively is worthy of serious consideration. Although individual contact with the teacher or small group of teachers is still fundamental, there are many different settings for it: (a) the school, (b) meetings held in teachers' centres, training colleges and within local authority or ministry offices to study a situation, or an innovation, or to finalise curricula and work out new methods and equipment and (c) the more informal exchanges at which each of the participants has an opportunity of genuinely enriching his experience. This two-way exchange of information should also involve a close, constant and organised relationship between the inspectorate and the authorities responsible for defining national or regional objectives and distributing resources. In centralised systems this is usually regarded as an essential pre-requisite for evaluating the work done in schools and assessing the results obtained in relation to the objectives proposed; but this can be effective only if it is based on a precise knowledge of the intentions of the responsible body and a good working relationship with and understanding of the functioning of the individual school.

The need for consistent, usable and appropriate information concerning the functioning of an educational system implies a revision of observation methods which can no longer be merely piecemeal or based on personal opinions. In several countries there is a central advisory service which guides and organises the work of the inspectorate in close co-operation with the highest authorities but does not diminish the independence of the inspectors. This is also true with regard to the schools. The inspector, or better still, the group of inspectors, can provide valuable information which will foster the school's aptitude for creativity by providing the elements for comparison and the possibility of placing a particular situation in a broader context.

In considering the relationship of school creativity to the information exchange function of the inspectorate, it is clear that ways need to be devised for analysing and improving existing practices. Many of these practices have developed over a time when the inspectorate itself was primarily a control mechanism, when schools were relatively static, and when the techniques of information exchange and communication were much more primitive than they are now.

ii) Initial training

The assistance offered to teachers by the inspectorate includes a contribution to the permanent training process designed to enable them to accomplish their task under the best conditions. This process cannot be separated from the initial training period which is its starting point and influences its development.

Inspectors have the choice of several ways of becoming involved in initial teacher training, according to the nature of the system within which they are working, the range of duties they are required to perform and their own enterprise and initiative. They can:

- join the institution responsible for this type of training, possibly on secondment;
- co-operate in the management and organisation of courses;
- take part in assessing the training received and in the selection of students;
- assist in teacher-training.

The nature and extent of involvement by the inspectorate in initial training will depend very much on local circumstances which may vary considerably even within countries. The inspectorate should at least be consulted and be able to participate in the discussion of questions relating to the content and development of training curricula whether training is done by a university or a specialised institution. It should aim to ensure that the curricula takes the fullest account of the schools' needs. Insofar as school creativity

is concerned, the inspectorate should take a particular interest in the ways that training is organised to stimulate, encourage and support innovations by young teachers. The involvement of the inspectorate in in-service courses and in probationary year programmes are ways of encouraging both experienced and new teachers that innovativeness by the new recruits to the profession is not a mark of their naivety, as teachers are sometimes prone to assume - but essential for the vitality of the school staff.

Certain aspects of the inspectorate's contribution to training involve a liaison role, i.e. of developing or contributing to a regular system of exchanges between universities and training centres on the one hand and schools on the other so that both partners will be aware of each others' problems and will be encouraged to co-operate. This applies not only to the various aspects of the pre-service training programme which is of the utmost importance to the future teacher (to whom schools should be open for a long period during this time of initial training), but also to the development of educational research. Indeed, by taking a greater practical interest in research, the inspectorate will be aligning itself with one of the key forces for criticism and change. Inspectors ought to be playing a major part in stimulating research and relating its findings to the practical needs of teachers, even where they are not able to take an active part within projects.

111) Continuing education

Social, scientific and technical developments call for the constant re-thinking and improvement of teaching methods and are reflected in a pressing demand for continuing training, not only from teachers, but also from the various parties concerned in the functioning of the educational system. The creativity of the school is a concept that depends for its practical realisation on the development of widespread schemes of in-service education for the whole teaching force and not just for the privileged few. Nor should it be restricted to those individuals who are willing to make considerable personal sacrifices at present to improve their qualifications and continue their personal and professional development as teachers. To meet the demand for in-service education, the inspectorate must broaden and adapt its role of stimulation and encouragement, its objective continuing to be the development of teachers' pedagogical capacities.

The various roles the inspectorate has to play in the development of the in-service education process imply that inspectors ought to participate in defining and implementing these activities, disseminating information about them, evaluating their results and supporting the teachers who take part.

Traditionally, inspectors have contributed substantially to the design of courses, the production of teaching and learning materials, and to pupil assessment. More recently, inspectorates have played a notable part as agents and facilitators of curriculum development in the wider sense of that term. But the rate and the extent of curriculum change is such that it is doubtful if any national or local inspectorates have acquired the skills and expertise to enable the schools themselves to play a leading part in the development of educational innovations. Since there is a discernible movement towards school-based curriculum development in most Member countries, it seems particularly important that the focus of the inspectors' involvement in this matter should shift towards school, local and regional level tasks.

iv) Participation in the development of the school curriculum and in teaching/learning processes

Previous publications of OECD have drawn attention to the changing nature of the task of curriculum development and the increasing range of demands that are being made on teachers(1). It is not necessary to repeat what is said there. However, we should at least recall some of the problems that have arisen over the last two decades in the solution of which the inspectorates have had a part to play. These include:

- adapting and adopting nationally developed curricula to the needs of particular pupils or groups of pupils;
- participating in trials of experimental and other innovative materials and procedures;
- evaluating pupil learning and other changes consequent on the introduction of new materials and processes;
- devising strategies and procedures for local and co-operative curriculum projects, e.g. school-based curricular development.

v) Fostering and supporting innovation in school management and organisation

Much that is applicable to the inspector's role in the development of the school curriculum applies also to school management and organisation so no more need be said than that there is now a better appreciation by innovators and developers than ten years ago of the interdependence between it and curriculum change. Studies in several OECD countries have disclosed the complexity of the task of organisational change and the danger of innovation failures when organisational variables and human relationship problems are ignored or

1) Handbook on Curriculum Development, OECD/CERI, Paris, 1975. School-based Curriculum Development, OECD/CERI, Paris, to be published 1978.

misunderstood(1). Other studies have drawn attention to practical programmes for the support of organisational innovation, in many of which the inspectorate plays an active part(2). In Chapter III of this report the relationship of school organisation to creativity has been examined in some detail. As to the inspectorate's role in the rethinking and redesigning of organisational structures, we feel that the following considerations are of some importance:

- management and organisation raise complex, technical, and human problems requiring more careful appraisal than brief occasional visits to schools permit;
- the inspectorate is generally required to evaluate and advise on different aspects of organisation, including staffing, and needs adequate criticism and techniques for this purpose;
- the move towards participatory school management raises questions concerning the role of the inspectorate as well as that of the Principal and Heads of Departments, but there is little evidence that these questions are being as widely debated as they deserve;
- a redefinition of the inspectorate's role including the delegation of certain administrative, clerical and supervisory duties is needed if inspectors are to take an active part in thorough-going organisational and management analysis of schools.

vi) Encouraging a wider role for the school in community development and social and cultural change

The specific contribution, actual or potential, of the school to social and cultural change, has been widely debated in Member countries during the past ten years, and it is discussed fully in Chapter VII. Our concern here is with the inspector's part in it, if any.

Inevitably the inspectorate finds itself in a difficult position with regard to proposals for such far-reaching change. Normally they come from outside the central administration or the confines of established authority, while the inspectorate is one of the key agencies with defined responsibilities for controlling the work of schools and teachers within the established political and administrative system. Nevertheless the inspectors are in close contact

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- 1) N. Gross, J.B. Giaquinta and M. Bernstein (1971) Implementing Organisational Innovation, New York; Harper Row. E. Richardson (1974) The Teacher, the School and the Task of Management, London: Heinemann.
 - 2) R.A. Schmuck (1974) 'Interventions for Strengthening the School's Creativity' in Creativity of the School, Paris: CERI.

with individuals and groups within the teaching profession, and within the administration, who are the very people promoting these different kinds of social change - albeit primarily within the educational system. In some countries, for example in Switzerland, a substantial proportion of the inspectorate is active in political affairs at local and regional levels; in others, individual inspectors have played an active part in promoting community schools and other kinds of innovation which significantly challenge traditional conceptions of function, role and management.

Perhaps a greater sensitivity to the issue of social and cultural change through educational institutions and processes is what is required of the inspectorate, rather than any attempt to formulate policy or to define a role as cultural change agent. Such sensitivity goes beyond mere awareness of an ongoing debate or recognition of conflicting sets of proposals for action. The role of the school is changing and its potentiality as an educational humanising force is still an open question. From their unique position of understanding, inspectors are well placed to make their own assessments of schools as socially and culturally creative institutions. This does not involve an addition to the range of roles which as has been shown will surely tax the resources of any inspectorate to carry out effectively. Rather, what is suggested is an orientation that goes beyond information exchange, control and various forms of pedagogical support, to an analysis of the aims and purposes of schools and an appraisal of the educational task which they might be fulfilling. This is not of course a new orientation since in the nineteenth century one of the most distinguished members of the English inspectorate, Matthew Arnold, saw his task very much in terms of cultural and social analysis, criticism and reconstruction. It may be, however, that this mission has become submerged under the mass of administrative duties that is now the lot of the inspectorate to perform.

In order to play a part in facilitating the creativity of the school the inspectorate itself must conceive its own role in more creative terms and this means, amongst other things, a critical scrutiny and an imaginative reconstruction of existing processes and forms of education, including the form of schooling itself.

Chapter VI

PROFESSIONAL SUPPORT AND THE CREATIVITY OF THE SCHOOL

1. REGIONAL AND LOCAL PROFESSIONAL SUPPORT CENTRES (PSCs) - A DEFINITION

Over the past decade local and regional professional support to schools has been growing in various Member countries. In each country this process has developed in its own way, depending on the origin of the initiatives (teachers, authorities at the local or national level, inspectorates), the purposes and intentions of those concerned, and the concrete circumstances and possibilities in the particular region.

The diversity of arrangements is also expressed in the different names given to these institutions, for example: teachers' centre, school advisory centre, pedagogical centre, post-graduate centre, in-service training centre, learning co-operative, educational research and documentation centre.

It may be deduced already from the terminology that these facilities fulfil quite different functions, some of which are:

- communication (a meeting place for teachers, informal exchange of information, ideas, experience);
- dissemination of innovations (a supporting agency stimulating adoption and adaptation of innovations);
- in-service training (courses, workshops and seminars);
- curriculum development (school-based developmental work in collaboration with other schools and experts);
- resources centre (library, multi-media software, teaching materials, loan equipment, reprographic department);
- advisory work (mental health, child guidance, counselling).

In the different countries existing agencies differ radically, and even within a particular country centres often perform a varying number of these functions to differing extents. There is, however, a general trend towards more comprehensive approaches using the expertise of experienced and specially trained consultants. A feature common to all professional support centres is that such institutions provide schools with expertise to improve their functioning and to assist in development and innovation activities.

In this report we shall refer to all these institutions as Professional Support Centres (PSCs). This terminology is neutral in the sense that it leaves it open whether the activities and projects of these centres are directed mainly at teachers or individual members of the staff or at the school as a whole. The term PSC also leaves room for institutions that simultaneously direct their support towards promoting the well-being and progress of individual children more directly.

Our study of Professional Support Centres in the context of the Creativity project focuses particularly on the extent to which PSCs as external agencies contribute to the creativity, flexibility and independence of the school.

In Section 1, the reasons for the growth of external professional support to schools is elaborated, paying particular attention to those circumstances and considerations that have contributed to the emergence of regional and local support centres.

Central to the movement to provide external professional support to schools has been a recognition of the variety of problems schools have to cope with either in a long term perspective or in their daily management of school affairs. Professional support programmes were designed to assist schools to deal more effectively with these problems, which are summarised in Section 2.

In Section 3, several aspects of strategies for promoting creativity are discussed, particularly the importance of developing the capacity for sustaining innovation into each school. The ultimate aims of external consultancy is - or ought to be - the promotion of creativity: the strengthening as far as possible of the problem-solving capacity of both teachers and schools. This implies that, as this capacity increases within the school, reliance on external aid will correspondingly decrease.

Section 4 is a brief description of the Learning Co-operative in New York City which demonstrates one strategy for promoting creativity in a hostile environment. In the daily work of a professional consultant, and consequently also in the description and analysis of this work, nearly all details seem to be relevant. In a report based on an international comparison of existing provisions and practices, however, many of these details have to be left out; this case study, therefore, is discussed at some length.

Sufficient evaluation of professional support centres has not been carried out to determine the extent to which external expertise can help those involved in the educational processes inside the schools to (a) maintain their professional autonomy in regard to aims and methods of education, (b) strengthen their own and consequently the school's capacity to deal with change and innovation, and (c) adequately respond to the increasing amount and diversity

of learning and behaviour problems of pupils and students. It is hoped at the very least, however, that in raising these questions this report will clarify some of the problems and issues involved in the development of professional support centres and their relationship to the creativity of the school.

2. THE MOVEMENT TOWARDS EXTERNAL PROFESSIONAL SUPPORT TO SCHOOLS

Nowadays teachers are increasingly under the pressure of changing roles and responsibilities as schools are simultaneously challenged and threatened by an ever expanding fund of knowledge, by developments in science and technology, by a growing diversity of opinions about society, politics, education, ways and conditions of life abroad and at home, and by severe criticisms of their aims, functioning and outcomes from both inside and outside the educational arena. Gradually they are becoming aware of the widening gap between their professional responsibility towards their pupils, parents and, to a certain extent, the society in which they live, and their daily performance at school. Some, indeed, undoubtedly feel they are failing to some extent without being able to give a clear interpretation of their situation in which traditional norms, values, subject matter and common sense are evidently no longer as relevant to their daily work as in former days.

The educational system as such is not sufficiently equipped nowadays for the multitude of tasks actually assigned to it in highly industrialised societies. Its capacity to innovate and regenerate is inadequate. Unlike most industrial plants and larger non-profit institutions outside the huge bureaucracies of public administration and education, it has no built-in capacity for research and developmental work firmly connected with its production or service departments. The educational system is lacking many other characteristic features that make other institutions in our societies more flexible, as, for example, specific feedback mechanisms influencing productivity or warranting a particular level of professionalism.

In order to enable schools to cope with recent demands and evident stress at institutional, professional and even personal levels, support has become increasingly available from a variety of sources outside the school. Often in schools no specific expertise is available. Even at an initial stage an external expert may therefore be sought to reduce tensions and provide solutions to particular problems school personnel are unable to resolve. Well-trained and experienced consultants are especially useful here. They can help a school to point its capacities at particular worthwhile aims and do much to develop the abilities of its personnel to become actively and selectively involved in meeting the various challenges that confront them.

The range of these consultants' influence will, of course, depend upon their skill as counsellors or change agents and upon the agreement between them and the schools on the ultimate aims of their co-operation.

The grouping of such non-teaching experts in local or regional PSCs has certain advantages as, for instance, in permitting the direct exchange of information and experience between them and teachers. In any case, the PSCs provide excellent meeting centres for teachers and can counter problems of isolation. On the other hand such grouping may have some disadvantages, such as the risk of alienation of the experts from daily school practice and the colourful informal aspects of school life, and interruption in the interactive processes on-the-spot between school staff and the itinerant consultant. It should not be forgotten, however, that the ultimate aim of an expert is to make himself dispensable after a specified time of co-operation with a school. This, of course, can be achieved more easily by an outsider working autonomously and with a number of schools over the same period.

The Rise of Professional Support Centres

The emergence of non-teaching consultants (apart from the inspectorate) in networks of local and regional professional support centres (as, for instance, in France and in the Netherlands) can perhaps best be explained against a background of convergent trends:

a) The rise of the social sciences (psychology, educational sciences including educational technology, curriculum theory, planned change theory and sociology of education) and the increasing influence of educational research, which have resulted in rational analyses of the shortcomings of the traditional educational systems and in an improvement of the pre-service training of teachers (and, nowadays, even of support experts).

b) The intensification by national and local authorities of their role in the development of education during a period in which the strength and resources of traditional agencies (as, for example, the local school boards and the inspectorate) have proved to be inadequate.

c) Teachers and parents have become more aware of the increased social relevance of education, especially with regard to an up-to-date curriculum and teaching methods adjusted to the interests, needs and capacities of children. This awareness has developed at a time of: increased enrolments in education; the extension of the period of compulsory education; and a critical assessment of what happens at selective thresholds in the entire educational system as, for instance, entrance and promotion in the primary school, readiness,

eleven plus examinations or equivalent procedures for admission to streamed or tripartite secondary education

d) Curricula and school organisation are constantly under pressure as a consequence of social and economic development in industry, sciences, social and public services, and so on. Consequently, pressure is exerted on the teachers and the school as a social institution, both directly and indirectly. Schools are required to give an educationally relevant and socially consistent response to the challenges presented by the revolutionary trends in occupation and leisure at present and in the near future.

e) The process of information about education has been intensified in many countries. There is a more general distribution of ideas of educational reform and policy as well as of general aims and concrete possibilities of educational innovation. There is a better understanding and a more general acceptance of the basic idea of equality of opportunities. And there is at least a decided intention to promote a more favourable pedagogical climate in the schools (of benefit to the mental health of both children and teachers) through, for example, individualisation, elimination of unfair competition, and permissiveness.

f) The contexts in which education occurs have been influenced by an increased supply of educational materials, rather complex learning packages, expensive audio-visual equipment and software. This has given rise to such associated problems as: the need for objective information in order to avoid the purchase of inadequate or useless equipment; financial implications; and purposeful application in educational practice. There is a growing interest in education as an economic market and often schools seem unprepared in their role as consumer, economically as well as professionally.

g) Last but not least: recognition that the initial training period for a career in education has long been inadequate, and that the rather isolated position of the teacher should be widened to allow greater variety of social contacts outside the school.

This enumeration of trends favouring the establishment of support agencies is, of course, not exhaustive, and not all points are of equal importance with regard to specific situations in different countries. The following examples will serve to illustrate how the background and motives behind the establishment of PSCs may vary from place to place. In some countries, such as the United Kingdom and Australia, the social-psychological factors of teacher interaction were important elements in the rise of Teachers' Centres. Voluntary collaboration in an atmosphere of informality seems to be characteristic for many of these centres. There are none, or only very few, non-teaching experts involved in these mainly co-operative institutions which, in addition to professional support, perform

indispensable social-emotional functions. These characteristics apply also to specific movements in other countries as, for instance, the Freinet Movement in France and the Learning Co-operative in New York City.

In some other countries educational policy at the local or national level has led to the establishment of networks of professional support centres. In the Netherlands local authorities have stimulated the establishment of school advisory centres to take responsibility for the renewal of education and the mental health of children at school. An integrated approach of educational innovation and child guidance work at classroom level is seen as the most essential outcome of local authority policy. In Switzerland cantonal responsibility has led to the emergence of in-service education institutes (Lehrerfortbildung) that pay special attention to younger teachers and provide also supplementary courses for those with experience. In Sweden in-service training is closely tied up with the national school reform movement: its organisation and programmes are increasingly co-ordinated with the system of pre-service training for teachers as well as being supported by national agencies for planning and educational research.

In France regional and local support agencies have been set up as affiliates of a central agency. Initially emphasis was on documentation and reproduction services and the dissemination of results of educational research and developmental work at the national level. Nowadays their function and mode of operation express a shift in policy towards in-service education, advisory work, innovation and co-operative consultancy. In Quebec, Canada, innovative activities are directly supported by the Ministry of Education but highly decentralised with regard to planning and execution. In many cases emphasis is given to a systematic approach and scientific control of processes and outcomes.

In most places the principal source of professional support to schools and teachers was, until recent years, the inspectorate - the district inspector of primary schools or the, often centrally-based, secondary school inspector. In Australia, for instance, inspectors made frequent visits to the schools to assess and report upon the competence of teachers, the educational standards of the pupils, the conditions of school grounds and buildings, and to advise teachers in matters of curriculum and method. Their advisory function has more recently been extended to include the organisation of in-service education activities. The inspector's dual role - assessment and professional advice - became as in many other countries the target of criticism by educational writers and teachers' associations. Teachers felt that assessment for promotion and professional consultancy were incompatible functions. In many countries the consultative

function of the inspector has been transferred to a large extent to other educational personnel and it has been strengthened by institutionalisation and separate financial means. In all these countries the programmes of PSCs reflect in one way or another the historical roots of the consultancy function, using mainly teacher-centred and system-oriented approaches that focus upon curriculum and teaching methods, organisation and assessment procedures.

In some countries, there are yet other important factors that explain the emergence of professional support to schools. School advisory work in the Netherlands, for instance, had its origin partly in the mental health movement and school medical work as far as the child-centred individual guidance aspects are concerned, and partly in stimulation by teachers associations at the national level which some thirty years ago attempted to organise support to schools by national pedagogical centres for non-denominational and denominational schools separately. Another important factor in the Netherlands, the United Kingdom and Sweden has been the rise of the social sciences and the emergence of psychologists and educationalists as a professional class. In Portugal regional centres are projected (especially in thinly populated areas) to support those teachers and local monitors who work with the education-by-television system, Telescola.

Thus, a variety of motives and reasons have contributed to the emergence of professional support to schools and individual teachers. Assuredly in the initial phases no explicit references to the promotion of the creativity of the schools have been made. The basic idea of professional support to help a client system to solve its own problems independently has developed only recently and mainly as a result of theoretical work in the social sciences and a reassessment of the effectiveness of current programmes for in-service training.

3. PROBLEMS IN EDUCATION: A CHALLENGE TO SUPPORT PROGRAMMES FOR SCHOOLS

The rise of PSCs and an increasing number of their activities and projects are, as we have seen, basically expressions of the idea that schools and individual teachers are frequently unable to find adequate solutions for an ever-increasing number of educational problems. The most pressing of these are, perhaps:

- learning and behaviour problems of individual children, not only in infant and primary schools but, with the extension of compulsory education, at the level of secondary education also;

- social problems: deprived children, educational priority areas, schools in hostile environments, sex and drug problems in the school population;
- educational problems as, for instance, individualisation, team-teaching, grouping of pupils, application of new educational materials, media and software in classroom situations, assessment, evaluation and examinations;
- curriculum development and course reconstruction relevant to daily practice in the classroom but originating externally to the school (e.g. a national committee or a university project group stimulating development in a certain area of the curriculum);
- organisational problems as, for example, differentiation of tasks between professional staff, participation of non-teaching personnel and parents, decision-making in schools, the grouping of pupils, their promotion, and their occasional transfer to other schools (e.g. special education);
- in-service education of teachers, introduction of young teachers, retraining of experienced teachers, and a variety of specific problems in different subject matter areas and teaching methods as well as the integration of external courses into daily work at school;
- existing power structures in education (in schools and at the administration level) with regard to such diverse topics as parental pressure or co-operation, selection and allocation through educators' decisions, traditional authority of the teaching profession, biased policies with regard to salaries of teachers at different school levels or streams within a tripartite system as well as to their promotion and career planning and, lastly, the use of the school budget.

Again, this list is not exhaustive. Severe problems may arise, for instance, when attempts by schools to innovate at a local level are badly co-ordinated with initiatives at the national level. There is a general lack of long-term planning and top-base co-ordination which may cause confusion and inertness when initiatives interfere. But, generally speaking, one may say that to varying degrees programmes of PSCs reflect the existence of the above-mentioned problems in education. Not all points are included in every centre's programme, of course, but in several countries a tendency towards a more integral approach can be discerned.

Here it is relevant to refer briefly to the Dutch School Advisory Centres. These relatively well-equipped institutes usually group their consultants (educationalists, psychologists, etc.) into several multi-disciplinary teams, each operating in a defined area. These teams

provide both a comprehensive approach to educational problems in individual schools and deal with specific projects aimed at integral and school-based solutions to many-sided problems - for instance, the gradual transformation of traditional whole-class instruction into more individualised and non-graded education; the implementation of new maths teaching materials and procedures in the self-contained classroom; and the substitution of traditional subject areas such as geography, history and biology by integrated groupings designed specifically to appeal to the child. The activities of the distinct teams and the project teams are co-ordinated with child guidance work in both infant and primary schools. For example, a project team responsible for the innovation of initial reading instruction may also be in charge of the psychological examination of children with learning and behaviour difficulties in the schools involved in the project. It is thus the common responsibility of both the school staffs and the project team to provide for adequate help to these children and their teachers (pedagogical advice, additional remedial materials and techniques, support to parents, referral to medical officers or specialists, etc.). Teaching materials may be adapted by either the teachers or members of the project team. In either case experience and remedial programmes may be transmitted to other schools by itinerant consultants or the teachers themselves at meetings in the centre with colleagues and the project team.

The inflexibility of educational systems

The lack of specialised manpower in schools is an insufficient reason for schools not being able to solve their own problems adequately and, consequently, for the existing systems needing supplementary provisions. Many educational problems are created by the present system of schooling itself (e.g. as concerns school-readiness, motivation or drop-out).

The rigidity of the existing school systems, admission and examination procedures, regulations for the upgrading of staff and grouping of pupils, prescriptions for school buildings and size and shape of classrooms, in short, the administrative subsidy and control systems of national authorities are other important factors that may contribute to an explanation of why schools feel unable to cope with new developments. Often schools are unable even to handle everyday problems such as differentiation of courses, grouping of pupils for independent learning, creation of a school-based resource centre for pupils, reliable assessment procedures, open communication with parents, individual cases of social deprivation, adequate use of resources available in the local community, bilingualism in the classroom, migrants' children, and the consequences of the increasing turnover of staff.

It is obvious that professional support to a rather rigid educational system cannot reduce this system's rigidity directly. Nevertheless it is possible and often efficacious to help schools make a better use of the possibilities in the existing regulations. This may be one of the more direct strategies towards school creativity. In some cases a problem can be solved by transmitting to a school a better understanding of the latitude in educational regulations. In other cases a PSC may succeed in convincing local or national authorities of the inadequacy of certain interpretations of the existent regimentation and this may also extend the possibilities of the school.

4. ASPECTS OF STRATEGIES FOR PROMOTING CREATIVITY THROUGH PROFESSIONAL SUPPORT

Strategies of professional support to schools turn out to be of two kinds: those that result in almost permanent dependence of the schools, and those that enhance the school's capability to deal with new situations independently. This dichotomy can almost certainly be traced either to the personality and professional attitude of the consultant, to the way expertise is perceived by teachers, or to more structural aspects of the relation between the schools and the professional support centre. Indeed, personal attitudes often interact with professional or 'structural' aspects, the way in which a PSC is regarded by the schools may well, for instance, depend on the ways in which the teachers have exerted influence upon its programme and strategy.

1) Developing the capacity for sustaining innovation

There are many indications that a school's own capacity to deal with innovation and to solve educational or organisational problems independently can be strengthened effectively by purposeful aid from external experts. The creativity of a school may also, however, be hampered or annulled unintentionally.

In such sensitive activities as school-based in-service education or child-centred guidance work, a very important question seems to be the extent to which experts and agencies are aware of the implications of their approach. This applies especially if those concerned - teachers and consultants - are directly oriented to immediate goals in concrete situations as, for example, a specific change in the curriculum or teaching methodology, or a solution for a schoolboy with severe learning problems.

Professional support might imply paying attention almost exclusively to the solution of daily problems. If in such a case the school

is obliged to ask for assistance and advice again and again, the problem-solving capacity of that school is not enlarged and in fact the dependency of the teachers on external support is increased.

For obvious reasons, agencies and individual experts attempt to design innovative strategies that will result not only in concrete solutions for concrete problems or in a co-operative effort of the teachers and the consultant towards provisionally satisfying solutions, but also in an enhancement of the ability of the staff to cope with similar problems in a variety of circumstances. The crucial question, of course, is how this may be done. Which kind of activities and which approaches do promote the creativity of the school?

11) Importance of attitudes and continuity in interpersonal relationships

Attitudes of both teachers and experts seem to be decisive, not only in the initial phase of first contacts between a school and an external expert, but in the processes that follow, and in the final stages in which expectations with regard to the new accomplishments and their applicability become realities. In other words, continuity in the relationships between school and external expert is important throughout. A reasonable stability in the staffs of both the school and the PSC is, therefore, a pre-requisite for an atmosphere of confidence.

A vital principle in the strategy of any PSC is to mitigate any sense of isolation or passivity within a school or on the part of any individual teachers. Isolated non-co-operative entities in a client system tend to develop potentially harmful attitudes or even actions that may well impair attempts at innovation elsewhere in the system.

An active approach on the part of the supporting agency might be considered to be an obvious pre-requisite, but in actual fact this is not always the case. Many PSCs that are nowadays active in building up and maintaining relations with their client systems have been set up as rather passive documentation centres waiting for visitors, avoiding advertising and very reluctant to go beyond the supply of 'objective' information about available educational materials, audio-visual aids, software and general subject-matter sources.

A passive attitude of a school, or withdrawal reactions of teachers, with regard to innovations wanted by colleagues or stimulated by external agencies cannot be seen as favouring the creativity of the school. Nor is activity merely as a response to the challenge of an expert or on the invitation of a local PSC enough. To strengthen creativity means to create intrinsic motivation on the part of school staff, i.e. an active and positive attitude based on knowledge of

shortcomings in the processes and institutions of education and some acquaintance with philosophies of education and educational change.

iii) Time for assessment and internalisation

As soon as they have become active and participative, teachers need time to develop an adequate response to suggested innovations, even if these come from their colleagues. To assess and internalise new ideas and practices seems possible only in a relaxed atmosphere. Teachers also need time to become familiar with the elaboration of an innovation so that it may be applied in a real situation in their own classroom, and they should participate in working it out. Thus, enough time and a secure and stimulating atmosphere are vital factors in evoking an internal dialogue among individuals or group discussions among team teachers considering proposed innovations.

Another crucial point relates to the definition and actual use of the teacher's working-day. Teachers need time to participate in joint activities of their school and the PSC. They need opportunities to reflect upon an innovation or upon their specific position in an entire project, and also upon the implications of intended innovations with regard to the school as a social organism: redefinition of roles, explanations to parents and pupils, and the like.

The time factor is only one reason why an innovation contract between both partners, the school and the centre, is desirable. Such a contract describes the goals of the project and the innovation procedures, but it should also mention, for instance, the availability of materials, the willingness of teachers to participate in training courses, budgetary aspects, etc. Moreover, a time-table of the project should be included: both the school and the PSC must be aware of the end of a specific relationship when strengthening of the creativity of the school is considered as an essential side-effect of the supportive activity.

As teachers are appointed to teach and as, often, no specific regulations are made for "extra" activities that nowadays count among their professional tasks, a redefinition of a teacher's working-day seems necessary in order to prevent conflicts in the near future. These can occur, not only between teachers and experts or between teacher unions and authorities, but also between teachers and parents who wish the best education available for their children.

iv) Participation in planning and execution

Teachers are naturally reluctant to accept innovations if their advocates adopt an authoritarian or dogmatic attitude. Hence, active participation by the teachers in the making of crucial decisions, and in the planning and execution of innovations are important

components of any strategy to promotive creativity. According to experience in Australia, France and the Netherlands, one way of favouring teachers' participation is, for example, to set up an initial project in which adaptation, production and modification of learning materials is emphasised, especially when these activities are obviously in the interest of deprived or educationally handicapped children. Another, more demanding, way is to create part-time opportunities for teachers in educational research, curriculum developmental work or counselling. More reliance on the schools' own resources means less dependence on outside support and avoidance of many of the dissemination problems that usually occur in RDD models of planned change in education.

It is incorrect to suppose that innovations always come from outside the schools. Many innovations are initiated by teachers themselves and, consequently, an increasing amount of professional assistance goes to support innovative schools as, for example, in Canada, the United Kingdom, the Netherlands and Denmark. It cannot be denied, however, that most of the major innovations in an educational system are perceived by the schools as coming from "the top" (e.g. the central administration, the theorists, the universities). Especially in countries with a well-co-ordinated national educational policy, as for instance Sweden, teachers in the schools may regard suggested innovations as imposed educational change. This applies even if they agree generally with the aims and general decisions of the authorities at the national level.

Much depends therefore upon the attitude of the people in charge of the planning of guidance and in-service training programmes. Teachers' participation in the very initial stages is absolutely necessary. The amount of freedom and discretion that is manageable will depend upon the school and individual teachers. The degree of participation can be discussed and planned in collaboration, but it should never be taken for granted or eliminated if a creative response by teachers and other school personnel is desired.

v) Some structural components of support strategies

In addition to the more personal, psychological and professional aspects of support strategies that have already been discussed, there are some important structural factors that may promote the creativity of the school or, at least, lessen their dependence on outside assistance. These factors are termed 'structural' to underline their connections with the more formal and institutional relationships, official regulations, and organisational aspects of the school system.

It is important for a number of reasons that teachers regard a professional support centre as existing for their benefit, contributing to the effectiveness of the school system as a whole, and not

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as an institution imposed by the authorities to complicate their tasks further. Teachers should, therefore, have direct influence upon the programmes and strategies of the PSCs, and also upon their internal organisation so far as relationships with their schools are concerned. From the start, teachers should be represented on the government body of the PSCs, together with local or regional educational authorities and some members of the centres' own staff.

With regard to the power structure and hierarchy of a centre, at least two points need attention. The first is that the professional autonomy of both teachers and supportive staff must be guaranteed. If, for example, teachers and experts co-operate in a planning committee for the establishment of a long term policy for a PSC, neither teachers nor consultants should impose their opinions on the other. Dominant or authoritarian behaviour, or even direct coercion, may be a possible way to promote educational change of a superficial kind, but it certainly does not lead to the strengthening of a school's creativity nor to stability of relationships between schools and the supportive agency. Voluntariness is a more constructive principle for the reinforcement of professional responsibility and creative behaviour.

Secondly, in the minds and actions of both teachers and experts there must be a clear distinction between inspection and guidance. The external consultants' role is to help the teachers, and they should not be asked or coerced to participate in promotion procedures or teacher evaluation. This distinction should be clear, not only to teachers and parents but also to authorities, supervisors, administrators and last, but not least, the inspectorate.

In summary, when experts try to transmit their skills to a school, they should convey their expertise to the staff in an effort to motivate or provoke the school to do as much as possible on its own. The number of schools they are able to help will depend upon their success in this respect. It is most important that schools learn how to analyse problems, how to get in touch with other schools dealing with similar problems, and how to find and mobilise other agencies for proper help. If a staff knows how to identify and analyse educational, organisational and professional problems, most of the solution-oriented work has already been done.

An important aspect of strategies for promoting creativity of the school is in their potential to maintain a certain level of creativity in circumstances where no external support or stimulation is present. In addition to the factors already discussed, therefore, the organisation of co-operation between schools and the creation of occasions for informal meetings outside the school setting are essential if the school's capacity to solve its own educational and institutional problems is to be stabilised.

5. CREATIVITY IN A HOSTILE ENVIRONMENT - THE LEARNING CO-OPERATIVE IN NEW YORK CITY(1)

For a consultant, the passivity of a school in a local school system or the inertness or hostility of a teacher on a school staff which has volunteered to participate in a co-operative effort, may be a difficult problem in the initial stages of work. A certain degree of reserved behaviour on the part of practitioners has been fairly common in a number of countries. Misconceptions about the role of professional support and inspection of schools or the fear of the introduction of economically-oriented accountability measures by centrally-based policy-makers, for example, can be important sources of negative unresponsive behaviour on the part of individuals within the school.

Far more severe are such phenomena as lasting mistrust or even extreme hostility among and between teachers and local authorities or the central administration. Even support agencies may become involved, especially when they have been initiated by the central bureaucracy. Deep-rooted distrust resulting in, for instance, aggressiveness or apathy, is of course exceptional, particularly when an entire school system is concerned. A recent experience with a deliberate approach to cope with such a hostile situation (the 'Learning Co-operative') was reported to the Creativity Project from the United States and this provided a case study that it is fully relevant to summarise here.

At the time of the birth of the Learning Co-operative (1971), New York City was characterised by a huge educational system, recently decentralised through a considerably strife-ridden process, a teachers' strike that disclosed severe racial, ethnic, class and other civic division, and schools frequently being attacked as failure-ridden, oppressively bureaucratic and unresponsive to their clientele.

The co-operative was initially established on an experimental basis to carry out a professional support process for schools on stimulating communication and co-operation between central authorities, local school districts, schools, teachers, parents, administrators, and other interested members of the community. It consisted of a loose network of agencies, groups and individuals involved in the school system, co-ordinated by a small supportive staff. Its central concept was the belief that whatever could be done was likely to be

1) This discussion is based on a paper by Dr. Edythe J. Gaines, Executive Director of the Division of Educational Planning and Support, N.Y.C. Board of Education on "The Learning Co-operative: A Support Concept for the New York City Public Schools".

accomplished only by co-operative and collaborative efforts. So, after discussions with teachers, visits to schools and other informative activities had made it clear that there did indeed exist a fair degree of consensus concerning the kind of education that should be brought into being, a working document, 'Design for Change', was written and distributed widely for reaction and revision, and eventually published as a guide defining aims and strategies. The specific purposes of the Learning Co-operative were set out as follows:

- a) To help identify useful practices and programmes that work, disseminate information about them, and encourage the spread of their benefits to as many students as possible.
- b) To help develop new models and new alternatives for learning and thereby provide parents and staff with a wider choice of learning programmes.
- c) To help create linkages among innovative institutions or individuals for specific purposes which are focused on results at the level of the student.
- d) To help construct new forms of staff development in the belief that the best programmes are ultimately as good as their practitioners.
- e) To help to attract various kinds of financial support for special programmes in the belief that there are many agencies, institutions and individuals who want to make a contribution to education.

As to approach, the Co-operative was guided by three principles in particular:

- emphasis on educational success, on programmes that work, on development and support of a critical mass of high quality schools created within small sub-units of the lesser system thus making it possible to 'topple' the rest of the system;
- emphasis on solutions, on results in other schools that have solved certain problems although they work within the same external constraints, on dealing with the failure syndrome by finding, devising and disseminating visible solutions to major problems, thus providing models and examples which rob others of their excuses for failure;
- emphasis on the motivation of the school staff, on the professional responsibility of the teachers and the engagement and participation of all others concerned, thus evoking a new spirit and the courage to go on.

The starting point was the question, "If some schools can succeed in teaching children basic skills where others are failing, why then is the failure tolerable?" Thus, the Learning Co-operative's dissemination function evolved into a strategy for positive change

that emphasised solutions that would make educational failure illegitimate. In a series of conferences, a demonstration of a number of possible solutions to problems were presented. Participants were then asked, "if we have shown that a particular reading or mathematics problem can be solved, why not attempt to solve it where you are?"

Armed with the positive responses of participants and the obvious need to devise realistic programmes that could work, the Learning Co-operative expanded into a number of support service units. The units include prize winning radio and television stations that produce both institutional and community service programmes, a well-staffed and well-equipped audio-visual unit with motion-picture making capabilities; inter-disciplinary units in the areas of bilingual education, career education, early childhood education, curriculum development, staff development and educational management; subject bureaux in art, English, foreign languages, health and physical education, mathematics, music, science, social studies, libraries and textbooks. The staffs of these units have high professional training and most have long experience.

Reliance on co-operative effort, belief in the dissemination of information about solutions, emphasis on staff development as an instrument of institutional renewal and development, and the use of positive incentives to support institutional change and development, are essential aspects of the Learning Co-operatives strategy. This strategy is directed towards strengthening the problem-solving capacity of schools without making them dependent upon external support of a more permanent character. The hostility of people in the field toward the central administration has been reduced by the promotion of co-operative action in the system, by an organisation considered not quite 'of the system'. It will remain to be seen if this potential for on-going support can continue as the Learning Co-operative itself becomes an "institution".

6. THE PARADOX OF EXTERNAL EXPERTISE AND CREATIVITY OF THE SCHOOL

The real cause of the helplessness of so many schools has to be sought outside the restricted territory of education as such because they are performing their task in a societal context with rapidly changing components. As we have noted, teachers and students are increasingly under stress of new developments in science, technology, commercialism and communications, all of which affect their daily lives. They experience the fundamental unpredictability of changes in the structure of society and in the "fundamental" conceptions of life, and they don't know any better than many other people quite how to react to changes in attitudes towards, say, the

family, the workplace, civil rights and emancipatory movements, international co-operation, environment and energy problems, democratisation, permissiveness towards youth and increasing intolerance towards the aged.

It remains to be seen whether schools, even when supported by external expertise, will be capable of coping with these outside pressures; but schooling itself may prove to be a contributory factor. The impact of advisory work by external agencies itself creates a rather paradoxical situation. Unquestionably there is a risk of the schools' increasing dependence on outside assistance although the ultimate aim of such intervention should, in the minds of both teachers and experts, be the precise opposite.

Acceptance of, or recourse to, external professional support brings a school or an individual teacher at least temporarily into a situation of dependence. The extent to which this occurs turns on (a) specific characteristics of the school, (b) the type of project that is carried out, (c) the often implicit expectations of the staff and (d) the strategy and professional attitude of the external consultants. Increasing dependence may result, for instance, if external advisers start from the premise that, by their nature, schools are not capable of reacting adequately to social change, proposed innovations or, even, problems arising internally.

As we have said several times, the task of a consultant must ultimately include making himself dispensable. As far as possible he must transmit his capabilities to the school, entirely in the case of purposeful innovation projects and in-service training courses, and partially, with regard to other activities, for example, the psychological examination of children with learning difficulties. But now problems, new educational technologies, new organisational patterns, new relationships with the surrounding community, new teaching staff in the schools, new elements in the initial teacher training programmes, will not only continue to challenge teachers and schools, but also to influence the position and programme of the supportive agencies. The challenge to experts may be even more problematic because of their dual role in decision-making strategies and operational co-operation with schools. They also have to concentrate upon solutions, but in the very early stages and often, like teachers in a latter stage, with no clear ideas about the ultimate outcomes.

In the internal organisation of a PSC, and especially in the definition of the tasks of the consultants, some provision must be made for study and analysis of possible support tasks in the future. Periodic recycling of a centre's staff is a necessary condition for the continuation of efficient professional support to schools and a guarantee for the maintenance and upgrading of the level of institutional creativity in the future. To a certain extent a positive

outcome will depend upon an accepted strategy that will include: the creation of structures that leave enough room for discussion, internal dialogue, trial and error and a choice between realistic alternatives; the strengthening of attitudes and patterns favourable to open communication and co-operative relationships; the recognition of experience and expertise both inside and outside the school; and, above all, the promotion of the most fundamental attitudes of human tolerance and willingness to communicate personally and professionally, in organisational frameworks, in professional literature and in the political debate. The specific position of an external adviser aiming at a constructive relationship with the school members ultimately depends upon a sense of mutual responsibility founded in a professional commitment to improve the schools.

Chapter VII

THE ALLOCATION OF FINANCIAL RESOURCES AND PUBLIC ACCOUNTABILITY

1. INTRODUCTION

Revenue production and resource allocation are inevitable and universal characteristics of all school systems. Here we are concerned with the relationship between the various forms of resource allocation and their effects on the creativity of the school. To this end, it is proposed to examine the different crucial points in the resource management system to assess how operations at each point may affect creativity at various levels of the educational system, and compare recent experiences various OECD countries have had in reforming their systems of allocation. Examples will be taken from Alberta and Ontario, Canada, France, the Netherlands, Norway, California and New Jersey, U.S.A.

In describing the functioning of a resource allocation system, one is dealing with a number of levels involving larger and smaller units of analysis. Each of these acts both as a receiver of funds from above and a locus of decision-making in their transmission to lower levels. An analysis of how the system of resource allocation can be used to enhance or inhibit creativity in schools, ought to strive for an understanding of the process of decision-making and fiscal transfers at all of these levels.

Some actions may conveniently be seen as a response to externally imposed or intruding changes, others as themselves instruments of change. "Creativity" as defined in this Project, refers to either of these sorts of actions so long as they represent an intelligent and purposeful mode of operation at their level. The creativity of an action should not only be assessed at its own level, however, but also, in terms of the effect it may have as an external influence at other levels. Each level of administration, from the central government to the local school, may demonstrate considerable autonomy in rejecting new programmes or in putting new programmes into operation. Thus, potentially creative measures initiated at a higher level of administration may be implemented in a totally non-creative way at lower levels while conversely, a neutral or constraining external situation may be used creatively. Educational planners and

policy-makers should be fully aware of this. Further, it is not enough to evaluate amounts, kinds and structure of resources; it is the uses of resources that have a real effect on school system creativity and it is they that will partly determine the direction which the use of future resources will take.

2. THE RESOURCE MANAGEMENT SYSTEM

Differences among schools implies different solutions to the problems they face. Yet current strategies of resource allocation often assume that schools are more alike than they are dissimilar and that the major problem is that of the quantity of resources to be made available. In fact, what is important is the way in which resources are creatively utilised to resolve the problems in hand.

Policies for the production and allocation of resources in the various Member countries cover a wide range of possible alternatives (which themselves illustrate the complexity of the problem):

- highly centralised systems for both collection and allocation of fiscal resources, with an equal programmatic disbursement system;
- highly centralised systems, incorporating compensatory programmes that attempt to redress prior inequalities in educational programmes;
- systems that are basically centralised but allocate resources to local districts on the basis of income from those districts or programmes operative in those districts;
- systems that are not strongly centralised for most functions, but do offer national or state subsidies designed to alleviate inequality;
- systems that are effectively dominated by local conditions - in some areas, state regulations require minimum performance standards from local districts; in others no such regulations exist.

There is a tendency to assume that all of the various levels of decision-making in school systems are co-ordinated in producing a certain variety of product, generally conceived of as student performance. Performance will be discussed more fully below, but at this point it is important to mention that only in an aggregate which is largely misleading can a school system as a whole be seen to have this monoplex scheme of input and output. The functional situation is really much more complex. One must look at each of the different loci of decision-making in order to assess its own input and output, for school systems resolve into a variety of different units, from individuals to population aggregates like teachers, to schools

themselves, to districts, regional affiliations and different levels of the state or national centralised administration. Personnel at each of these levels have different characteristics, and the administrative structure itself differs among them. This means that even in similar situations a different style and content of decision-making will ensue.

For the sake of simplicity and brevity, we will look at four loci of decision-making, defined in terms of four of the essential functions of the system, particularly as they are related to resource management and the institution of changes to achieve education policy goals. These areas correspond in many ways to different levels of educational systems: revenue production, resource allocation, programme development and implementation, evaluation and accountability. As we look at each case, we will attempt to assess what the level of action and actor are, what changes are being required and from whom this mandate comes, and what the abilities and constraints (input) and products or decisions (output) may be.

Revenue Production

This constitutes the highest level of the decision-making hierarchy, and until recently was not even necessarily regarded as a part of the educational system. Various legislative bodies have generally been responsible for assessing the means and amounts of revenue collection. More often, the senior educational administrators in the school system request various amounts of funds at various levels and are given their allocation, but they have little role to play in determining how these funds are raised. State and national laws usually indicate one or another form of revenue collection. In recent years, however, the "inequality" controversy has begun to demonstrate that revenue production itself can play a major part in the education system's functioning. In North America, for example, revenue production is not merely an irrelevant "given" from outside, but is in itself an active component in determining the equity of school systems and their relationships to local and larger constituent communities.

The forms that revenue production will take are most likely to be set by political authorities, not educational administrators. Nevertheless, educators should be able to provide reliable information to those responsible for making decisions on the production of revenue (i.e. national authorities, legislators, the courts, the taxpayers). Beyond this, it might well be considered that the form that revenue production takes, while of direct consequence to the school system as a whole, would have little effect on the functioning of an individual school. Yet the availability of finance earmarked for change within a school may well be dependent on whether those

funds are levied locally or nationally, or made available through such devices as a voucher system, for example. It may be, for instance, that schools in an area where revenues are raised locally will find additional funds for experimentation easily available because this reflects the interest of the dominant social group in the area - or as school costs continue to rise and taxpayers rebel, the reverse may be true. On the other hand, funds raised nationally may be more readily available to local school districts or to schools if the central/state/provincial government has a policy aimed at encouraging district or school autonomy.

Resource Allocation

As far as educational administrators are concerned one of the most important features of the revenue production system is as input into the process of resource allocation. Assigning funds to different localities, programmes and administrative sectors is one of the essential tasks of the senior administrators in any educational system. Yet the very position and status held by these senior administrators is largely determined by the revenue production schemes operating in their area. Thus, if revenue production is highly localised to the district level, resource allocation is likely to be localised as well, with a corresponding diminution in the importance of central administrators at the national or state level. Even if revenue production is centralised, if re-allocation of funds is largely determined by the financial input of a given district or by its number of students or on any other flat amount basis, the autonomy and influence of the central administration will be reduced. On the other hand, if the central authorities control the choice of programmes on which funds may be spent, or the criteria according to which they are allocated, they are in a much more influential position in the educational system.

What is the output of decision-making at the level of resource allocation? In its most basic form, it is responsibility. That is, those persons who are given the authority to spend funds, the administrators who are the recipients of resource allocations, become responsible and accountable for the ways in which those funds are spent. Generally, resource allocation at its broadest level does not directly determine the ways money will be spent. The specific programmes are the responsibilities of other members of the system. These other decision-makers may be at the centralised level of the administrative system, or they may be local officials. In most "real-life" situations a combination of the two forms exist. The ways in which finance is allocated - its flexibility, the possibilities for investment, the degree of insistence on accountability - will all affect the degree of creativity possible within school systems and within individual schools.

One point to bear in mind about decisions on the allocation of resources is the effect these decisions may have on the functioning of the system as a whole. Too often changes are made in the structure of allocations which upset the entire balance in the operation of the school system even though they were only aimed at modifying a small sector. One example of this is the introduction of large scale national or state funds for "innovation and experimentation". When these funds are plentiful, and programme development funds at a local level scarce, there is a tendency to compete for the state funds with a series of "innovations" which may never be fully implemented or evaluated and which in many ways represent sporadic random changes. When the extra funds dry up for one reason or another, there is no sustained effort or possibility to continue support of worthwhile innovation efforts. This raises the question of the forms and provenance of external financial allocations made to schools for innovation purposes, and the possibilities and mechanisms of internal redistribution of these additional resources within the school.

External allocation is generally made available to the school in one of two different ways. In the first, a part of the total revenue is set aside to form a 'pool' which may be at the central or local level. Application for extra financing from this pool is then made by the local education authority or by the individual schools; the granting of this request is normally dependent on assessment - often made by the inspectorate or an advisory body - of the capacity of the school to carry out the project and on the merit of the project itself. Often the 'granting' body will establish its own criteria on the basis of political or educational considerations: the improvement of educational provision for the disadvantaged, the introduction of educational technology, or the development of 'mixed-ability' teaching. This method of financing has been common in the United Kingdom, for the development and experimentation with innovatory school materials. More recently a large scale exercise has been set up by the Australian Schools Commission to provide discretionary funding in a number of areas of designated high priority by the Commonwealth Government. Many similar allocation schemes have operated in the United States where the Federal Government has provided compensatory funds under the Elementary and Secondary Education Act. As a method it has had the effect of allocating to lower levels of authority a considerable degree of autonomy over the use of special funds, but with the result, perhaps, of inhibiting a somewhat freer rein for creative action within the individual school.

In the second approach, a fixed sum, above the normal allocation to the school, is granted with the intention that this should be used for development activities and accounted for as such. Generally the amounts so allocated have been comparatively modest, allowing

more for the purchase of extra materials, rather than for the appointment of additional personnel. These funds have often been insufficient for any significant change to take place and their use has not enhanced creative decision-making at the school level. A fairly radical approach is to grant school personnel the authority to re-allocate resources within the school budget by the technique of "virement". This gives them considerable discretion over the use of funds.

Various experiments and cautious improvements in virement have been made, particularly in the Netherlands and the United Kingdom. These have varied from a relatively modest change which gives school authorities some discretion in the purchase of materials and equipment, through a stage when perhaps 5 per cent of the allocation of teaching staff can be 'converted' to para-professionals, materials or equipment, to a granting of an overall lump-sum allocation which covers all school expenditure including cleaning and maintenance. In all these cases the allocation within the school is carried out by its policy-making body - the headmaster, the school council, etc.

As it is always difficult to re-allocate resources in the sense of taking them away from one department to give to another, virement has usually taken the form of setting aside a percentage of the total allocation into a 'pool' which is then used for development, or from any increments in the annual external grant. Where such virement has been granted the school has the potential to re-allocate its resources so as to encourage creative change. It does not necessarily follow, however, that this will be an automatic response. It could happen that increased power and responsibility would be concentrated in individuals or groups that have no interest in changing the status quo or in implementing non-authoritarian decision-making procedures. The way such funds are used will to a large extent depend upon the general atmosphere of decision-making and co-operation present in the school.

The relevance of changing forms and structures of educational finance systems for the creativity of the school is obvious enough at one level. School finance reform represents yet another change which schools will have to cope with and make adaptations to. Other repercussions are not quite so obvious: some schools, frequently the schools on the better side of present inequalities, will have the human and institutional resources to produce more creative adaptations. Conversely, the poorer schools or schools far from available external assistance may frequently lack the human and institutional resources to make the best possible use of their new fiscal possibilities.

Another factor to be considered in resource allocation, therefore, which has particular relevance to the concept of the creativity

of the individual school - is the allocation of funds to organisations which act as a support to creative change within the school - teachers' centres, advisory schools, local curriculum production units. The financial provision of such support services may be of as great an importance for a school's creativity as the way in which finance is allocated to and within the individual school.

Programme Development and Implementation

Once priorities to resource allocation have been established within a school system, the next step is the development of an educational programme both at the level of the school system and within the school: on the crudest level this means turning funds into plans. In considering first the school system, if decisions are made at the central level to allocate funds to improve physical plant, or increase academic performance, or institute bilingual education programmes, a series of decisions will need to be made and accepted at lower levels in order to establish the specific criteria for the building improvements, for the goals of academic performance and appropriate strategies for attaining them, and for the actual content of the bilingual programme, where such a programme is needed, and who is to staff it.

There are two steps in this process, viewed simply, which require creative action. The first is establishing the best internal shape for the new or altered programme. The second, which is frequently ignored, is integrating this programme into the existing educational system. Creativity is demanded at the implementation level expressly because it may not have been exercised at the programme planning and development stage. Programme personnel are often in competition with one another for scarce funds, which means that co-operation between them may be strictly limited. Creative programme planning and development requires, therefore, a broad system-level perspective that must not be disregarded when decisions are being made on resource allocations on the assumption that it will re-emerge when the school programmes materialise.

The problems of financing the development and implementation of innovations within the individual school are somewhat different. Almost all the changes that can be made at the level of the teaching/learning process involve additional human or material resources: more teacher time, altered or new accommodation, extra para-professionals, new equipment, printed curriculum materials, etc. It is important, however, to distinguish clearly between those funds that are needed initially for research, development and implementation, and those that will need to be budgeted for running costs. A failure to recognise the difference has often led to the abandonment of potentially successful 'creative' changes within a school. Thus, a

financial allocation might be granted on an experimental basis by an outside authority for three years, but no provision exists for making further allocations to cover running costs available on a more permanent basis or for the re-allocation of resources within the school budget itself. Special funding should be short-term in nature as compared to general long-term funding. However, financial mechanisms need to be established that will permit successful innovations to be integrated into the regular school offering. The underlying assumption is that all "successful" short-term special-funded programmes become long-term general-funded programmes. Here it is implicit that all new special programmes should undergo careful evaluation prior to becoming part of the regular programme.

Evaluation

It is not within the scope of this chapter to give a detailed discussion of evaluation, but the point should be made that evaluation must be considered on the basis of activities undertaken at all levels of decision-making rather than on an aggregate of the functioning of the system as a whole.

A difficult question to be addressed at the outset is the question of how to measure success: on the basis of programme performance or student performance? Evaluation of both of these alternatives gives rise to practical and conceptual problems. Intellectually, one may tend to favour assessment of student performance as the most reasonable measure of the success of schools, since, after all, it is students who are the most obvious clientele of the school, forming the most basic unit of the system. Students, however, come into the educational system from extremely varied backgrounds, directing them in various ways and giving them various abilities and potentials which are only partially alterable as a result of school experience. His individual characteristics, the school setting, the approach to the subject matter, the personality and background of the teacher are all factors that influence the student's performance. In addition to the methodological problems that prevent accurate assessment of the learning process and meaningful measurement of student performance and teacher competences, there are political problems that also must be faced. These centre around who should judge these competences: teachers' unions, university professors, administrators or inspectors in the state departments of education, students and parents all want to be involved in or control evaluation procedures.

Evaluations of programme performances are always based on an assumption they are closely related to the schools' part in student performance. One is thus taking an easier measure as an approximation of something difficult to measure directly. In effect, what often happens is that student assessment is measured on the basis of

standard criteria and norm-referenced tests, primarily for diagnostic purposes. At its worst, progression through the school system by students can become more a function of the time they spend there than of actual demonstrated or potential competency until the moment sooner or later when the selection process eliminates all but the most successful.

An additional and perhaps more serious conceptual problem arises if we do not look at students but attempt to evaluate programmes in purely administrative terms: fiscal efficiency, the quality of annual reports, innovations (measured quantitatively rather than qualitatively), and so on. This tells us little about the interaction between teacher and student, but it has proved convenient, nonetheless, to measure the performance of schools in terms of discrete units that are understood, that originate at a central point, that have certain defined goals and objectives, and that begin and end within the school system.

Thus, schools are often held more accountable for attendance, which is easily measured, than for production which is difficult to assess. The compulsory education requirement could be regarded as a compulsory attendance requirement, which in many school systems is the basic unit for calculating the resources to be allocated to a school. There is no way in which attendance is directly an output, yet it may be the primary requirement for continuing financial input.

Accountability

As noted above, part of the difficulty in this area results from the fact that the output from one level of the system, administratively, is part of the input of the lower levels. Students, generally perceived as the primary output of the entire school system, are administratively only the output of the very lowest level of the hierarchy in most cases. Establishing either (a) a change in this administrative system or (b) an overall coherence in the decision-making process at each level of the system (unlikely ever to be complete) is necessary if accountability is to work along with creativity to maximise performance. Frequently, school personnel are most creative in the areas and in the ways for which they perceive they will be rewarded. To put it another way: individual creativity may be used to improve that performance for which one is held most clearly accountable. In most school systems, teachers are frequently held more accountable for the behaviour than for the learning of their students.

Traditionally the professional accountability of teachers has been to political and administrative authorities at national or state levels - often mediated by school inspectors or their equivalents. Recently, however, the concept of accountability has underlined the need for a more responsible attitude on the part of the school towards

client needs and interests, and consequent efforts to ensure that schools become more directly accountable to the communities they serve have taken a variety of forms.

One of the questions that should be asked in this regard is the extent to which the fiscal/policy-making distance of community from local school, which centralised resource management brings, is responsive to the needs of the school as a unit of a larger educational undertaking but undermines the school's sense of responsibility to the community it serves. There is considerable *prima facie* evidence to suggest that it does so, notably from industrial and commercial studies which indicate that in large bureaucratic systems local administrators feel absolved of responsibility for long-range decisions and practices. Furthermore, when the resource allocation system is highly centralised, it is viewed as an external force by the local administrator, because of his relatively weak ability to influence it.

If school-level creativity is to be improved, however, it is not sufficient merely to give the schools greater control over the use of resources. In addition, it must be the task of responsible individuals in the school's formal organisation to make well-informed decisions about the use of resources and take relevant action. Accountability as well as a judgment of performance must therefore become an integral part of the planning process. When accountability is to a central authority there is a tendency for standards to become homogenised. For the same set of standards to be applicable to a variety of schools, which is a necessity for centralised administrations, these standards should be sufficiently general to allow for alternate approaches at the school level. Otherwise creativity, by virtue of being perceived as a deviation, is likely to be met with negative sanctions.

Accountability and evaluation should be geared not only towards providing information to the central authorities but also to the intermediate decision-makers. In addition, interaction with the environment, outside of the educational system, should take place at all decision-making levels. This should include information gathering and dissemination, and an on-going dialogue between educators and the public.

One attempt at this has been made in the United States with the introduction of an experimental programme designed to provide wider choices and diversity in the public schools by the use of educational vouchers. This programme provides a good example of the efforts of one school district to combine accountability to the local community with a decentralised administration and instructional policy(1).

1) The following discussion is based on a paper by Denis Doyle, School Finance and Organisation, National Institute of Education, Washington, D.C. on "The Alum Rock, California Educational Vouchers Project".

The basic idea underlying a voucher system is that government does not fund educational provision directly but, either wholly or partly, through vouchers for agreed values which parents use to pay for the kind of education they believe best suits the needs of their children. In response to criticism that educational vouchers would introduce a "market mechanism" or elitist orientation into the functioning of public schools, the Federal Office of Economic Opportunity which sponsored the experiment proposed that the voucher system be both "regulated" and "compensatory" and include significant safeguards:

- Schools must accept the voucher as full payment for educational services, minimising socio-economic segregation because poor parents cannot be excluded because of inability to pay.
- Educationally disadvantaged children receive a "compensatory" voucher, in addition to the basic voucher. These children become more "attractive" to schools as a source of additional discretionary income. At the same time, schools are encouraged to design special programmes to serve the needs of these children and become more responsive to their parents.
- To assure meaningful choice among varied educational offerings, schools are required to provide extensive information about themselves: e.g. educational philosophy, curriculum, faculty-student ratio, faculty qualifications, etc. This information is independently verified for accuracy and completeness and broadly disseminated to parents.
- To assure equal access by all students to all schools, non-discriminatory admissions and transfer policies are required. For example, if a school is over-applied, at least half its student body must be accepted by random selection. Invidious racial discrimination in both hiring of staff and admission of students, is also prohibited."

The first year (1972-73) of the Alum Rock demonstration developed as a sort of halfway house between "business as usual" and a voucher model. It seems to have done so because the two major parties involved, OEO and the school district, had disparate aims that called for compromise. The school district, in a low-income area of San Jose, California, was hard-pressed for funds and wanted further support in decentralising authority from the central district administration to the local school level. OEO was bent on finding a school district that would agree to test vouchers. From the school district's viewpoint, various elements of the voucher model ranged from mildly desirable at best to completely unacceptable at worst. From the OEO viewpoint, vouchers looked like a way to make schools more responsive to the needs of poor children and their parents, but there was no way to test that view unless some school system would try it out.

The school district's problem was how to accommodate OEO's desire for a voucher system without alienating its own constituencies - parents, principals, teachers, and central district staff. Parents wanted neighbourhood schools. Teachers wanted the preservation of tenure and no "unprofessional" competition. Principals and central staff did not want to get involved in a popularity contest among public schools, let alone compete with private schools. Nobody in the school system wanted economic competition to dominate educators' behaviour. And many Alum Rock parents, teachers, and principals were not yet ready to accept the voucher idea.

A decision to exclude private and parochial schools, and to guarantee continued employment for the professional staff, diffused much of the local opposition to the demonstration. So did the guarantee of "squatters' rights" to all parents who might want to continue sending their children to the neighbourhood school.

Even with these compromises and modifications, only 6 of the district's 12 schools decided to take a chance on the demonstration. With so few schools in the demonstration, all similar in curriculum and method, OEO and the district hit upon a way to provide more educational diversity by having each voucher school offer several programmes to choose from. Small groups of teachers at each school joined together to devise these new programmes - or mini-schools - 22 of which emerged in the first year. The array of mini-schools was at least roughly the same in each school; diversity and competition were thus largely confined within the walls of the neighbourhood school.

It is clear that federal agencies can offer incentives for schools to follow innovative policies, but they cannot closely control the shape the innovations will take in American public schools, with their long tradition of local autonomy. That shape is largely determined by local priorities and interests. The first year of the demonstration in Alum Rock produced results that were consistent with this viewpoint. With federal support, Alum Rock showed that it was possible to combine decentralisation of authority down to the school level with parental freedom to choose their children's school programmes. These are important elements in a voucher system, and they were achieved without crippling strife among the parties involved. (Teachers did not rebel against administrators, for example, nor parents against the school system). This accomplishment was perhaps easier in Alum Rock than it might be elsewhere because the district had already taken some steps to decentralise decision-making to the school level.

This decentralisation of decision-making authority to the school level had some particularly interesting implications for the allocation of resources within the school, as the district was obliged to move

towards a type of budgeting distinctly new in the American education system. Traditionally, school districts have budgeted expenditures into a series of "line items" (such as personnel, materials, maintenance, etc.) and then allocated a portion of each line item to a school on the basis of a formula. This conventional budget practice as discussed above does not allow the school to "trade-off" expenditures between one category and another. The new budget process, by contrast, gave considerable discretionary authority to teachers and principals. In Alum Rock, this authority extended primarily to compensatory voucher funds, but the district also sought to establish budgets that would rise or fall during the year as enrolment increased or declined.

If, however, the federal grant remains virtually the sole source of discretionary money for the schools, then little decentralised authority may survive after the federal grant ends. Nor is it evident that the district will develop other institutional mechanisms to outlast the duration of the external funds.

In sum, the major discernible effects of the first year of the demonstration was not upon parents' behaviour or students' academic achievement, but on the roles of central district staff, principals, and teachers. Each voucher school gained new autonomy, and teachers began working in new co-operative arrangements and with new discretionary power over resources.

One must await the results of longitudinal studies of operational voucher schemes before drawing conclusions about their general effects on the quality of educational offerings, the relationships between community citizens and their schools, improved student performance or the creativity of the school. This particular scheme, however, did demonstrate in its first year that vouchers could be made to work and that the project was administratively feasible.

3. RECENT REFORMS IN RESOURCE ALLOCATION SYSTEMS

In recent years, a number of countries have attempted reforms of their educational finance systems, which have clear implications for the creativity of the school. Efforts to provide equity in the provision of financial resources to schools, while at the same time encouraging local autonomy over the design of educational programmes have found expression in a number of ways. In Norway, through the system of central government subsidies, in the Netherlands with lump-sum budgeting, and in New Jersey through the formulation of a state plan for a system of "thorough and efficient" education. France, Alberta and Ontario, Canada, have also reported various efforts at reform.

The Netherlands(1)

In the Netherlands all secondary schools are financed entirely by the central government; but certain conditions have to be fulfilled before the flow of money can be set in motion. For instance, to be eligible schools must be able to accommodate a certain number of pupils, prior approval must be obtained for any building plans and the cost of equipment is tied to a rigid school inventory. When the school has been built, the level of its running cost will follow logically from the nature of the building and its equipment.

There are various channels through which this money flows from the central government to schools. The one that allows them maximum freedom in spending and gives the widest scope for creativity is that which provides for running costs. It is the administration of this flow of funds in particular that can demonstrate whether the financing system affords adequate scope to individual schools for solving the problems that confront them.

Covering running costs

The term 'running costs' denotes expenditure on equipment and other materials as distinct from expenditure on personnel. Before the standards for the running costs of general secondary schools were introduced it was seen that expenditure differed greatly from school to school. Since this was difficult to explain and since full financing by the government would mean the setting up of cumbersome machinery for verifying expenditure, efforts were made to devise a less complicated system.

The idea of analysing individual items of expenditure and turning them into running costs was rejected; the structure of overall expenditure on all government-maintained schools was analysed instead. The schools, scattered throughout the country, differed in size and often in composition as well. On theoretical grounds, there was no doubt that, in an absolute sense, the running costs of small schools would be much less than those of large ones and that the nature of the units indicative of the difference in size would play an important part.

If any of these units were adopted, verification machinery would have to be set up to check them in schools receiving government grants. But the very object of creating a generally applicable standard was to obviate the need to use cumbersome verification machinery. The criterion for the size of schools ultimately selected was the number of pupils attending them. On the basis of the theoretical link then between running costs and size in terms of the number of pupils, the correlation between running cost trend and pupil trends was determined by calculation. Once this had been established, it was seen that the system could be made more subtle.

1) This discussion is based on a paper by Mr. L.A.E. Feher of the Netherlands Ministry of Education and Sciences, The Hague, on "Financing Education by the Lump-Sum Method".

There was a clear relationship between running costs on the one hand and the number of pupils and forms on the other in government-maintained schools. That relationship can be expressed as:

$K = \lambda(P) + \beta(c) + C$, in which K stands for running costs, (P) for the number of pupils, (c) for the number of forms and C = a constant, i.e. a minimum amount of money all schools get independent of their size.

Expressing the cost of running government-maintained schools in this way and formulating at the same time the basis for the grants to other schools involves disregarding the individual items of expenditure. A logical consequence of this is that schools receiving Government grants should not be required to account for the way in which they spend the sums received. This relieves school boards of the burden of retrospective Government checks to ascertain how the sums have been spent, responsibility for spending the lump sum or block grant being now entirely vested in those boards.

If schools receiving grants do not use up the entire block grant received to cover running costs, the school boards are allowed to use the rest of the money at their discretion. The government regards any money left over as a reward for efficiency, and as not recoverable. If the school boards fail to make both ends meet, they are responsible and they will have to make up the deficit, either from parents' contributions or from the local authorities' own funds. This may be regarded as the penalty for inefficiency.

School boards consider that the lump sum system gives them greater freedom and enhances their responsibility - the latter making possible a more creative approach to problem-solving.

In the cost of running general secondary schools, there is the 'mandate' to spend the lump sum as efficiently as possible and in a creative manner. A case in point is the purchase of additional teaching aids and/or materials for the benefit of the school. Nevertheless, with education now being in a state of flux due to the breakthrough of new ideas, the running costs formula may well have to be modified. It may be a slow process but steps should be taken to prevent it from becoming obsolete or ceasing to operate as it was intended to do.

An example of a development which is affecting or will affect the formula is the fact that school classes are gradually disappearing. The term denoted and still denotes a group of children following a certain curriculum and staying together while doing so, and it figures in the running costs formula. If groups of changing composition are becoming more and more characteristic of Dutch schools and 'classes' or 'forms' are becoming unrecognisable as such, the running costs formula will likewise have to be changed. The necessity of doing so is already being felt in the Netherlands and a proposal to amend the Secondary Education Act to adapt it to the new situation is in preparation.

It should be observed in passing that the government introduced this system of covering running costs in the 1950s mainly with a view to reducing drastically the amount of paperwork involved. An incidental advantage of the system was that it facilitates drawing up Education and Science estimates within the framework of the total National Budget. The idea that creativity on the part of the school boards could benefit by the system had not yet occurred to anyone. Indeed, during the first few years the schools were even required to refund any surpluses they had, but the government dropped this requirement in the 'sixties and the school boards were then able to benefit fully from their newly-acquired freedom to spend the sums as they thought fit. They gradually realised the benefits of the system and have frequently expressed their enthusiasm for it. For the smooth functioning of the system there is regular contact between the Ministry and representatives of the school boards. This is useful for both parties, as it provides an opportunity to exchange information. This means that, as well as a flow of money based on standard costs, there is a flow of information that relates to the flow of money.

Such a lump sum system is most effective in increasing efficiency to gain the reward of surplus funds. It does not, however, have a ready built-in mechanism to incorporate educational breakthroughs and innovations, especially those with high initial cost. For this purpose, a more variable funding programme would seem necessary - i.e. an attempt to maintain the virtues of local initiative and centralised disbursement which characterise lump sum systems, but without their maximisation of efficiency over innovation. A possible solution proposed is that of spending without a simple maximal limit, regulated rather by standards of quality and efficiency and presumably the overall availability of funds. The danger is that some schools, which fell behind in the early use of available funds for innovation, would also fall behind in their ability to gain later funds, thus creating an ever-widening gap. The advantages, however, are potentially great as well.

If efficient spending can be promoted as a result of the opportunities afforded and if this leads to a premium which can be spent advantageously in other educational spheres, the entire educational system will benefit by adopting financing systems based on complete freedom of spending within certain limits and in accordance with reasonable standards.

France(1)

The remarkable centralisation and uniformity of the French system

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- 1) This discussion is based on a paper by M. Serge Duhamel, Ministère de l'Education Nationale, on "The Allocation of Financial Resources to Schools and the Creativity of the School - Situation in France".

raise questions about school creativity. Above the primary level, the state pays for 90 per cent to 100 per cent of operating expenses and for 75 per cent to 100 per cent of capital expenditures; all teachers and administrators are paid by the state. In all three categories, the allocation among schools seems equitable but rather arbitrary, since it is not related to educational need, and only to factors like the commune's tax monies per capita, the number of pupils at different levels, and the area occupied by the plant. Accountability is not in educational terms, but in financial terms only, and both capital investment and budgets are the concern of the commune and the state, not of the schools. The result is a certain rigidity and a lack of margins for even the cheapest experiments.

More important is the uniformity of educational policy. Teachers, employed directly by the state, are to a considerable extent told what to teach and how to teach it; they are subject to state inspections; and their students' performance is measured on national examinations. So there are two important inhibitions to creativity: a rigid financial system generally divorced from purely educational concerns; and a uniform educational policy.

To overcome these inhibitions, the French system includes, or will include, a number of devices, each of which raises further questions. Experimentation has been decreed for 20 or 30 schools at the primary and secondary levels, all under the supervision of a national research body which controls and evaluates them. It may be doubted whether experimentation can or ought to be limited in this way, since although tight experimental control is to some extent desirable, the system runs the risk of missing unanticipated innovations. Another question is how effectively successful experimental programmes can be disseminated to all schools. One answer is a programme instituted recently, wherein secondary schools are allowed to use 10 per cent of teacher time for unprogrammed activities. The results have apparently been uneven and in some instances unexpected. It would be of interest to know more about the way in which the "free time" is allocated and its results measured.

Finally, there have been two interesting budgetary developments in France. Consideration is being given to allowing schools to make more trade-offs among their management/operating budgets - largely supplied by the state - and their administrative/service budgets, to which the communes contribute significantly. This sounds promising for school creativity, as it introduces a needed measure of fiscal flexibility. The French system is also experimenting with a limited programme budget that would involve lump-sum allocations of personnel and funds to be used as needed - rather than as specified - to achieve a list of objectives. These objectives ought to be educational ones and valid performance measures should be developed. In other words,

this experiment depends on using true performance measures rather than simple work measures. With this proviso, the move towards a programme budget with lump-sum allocations could be enormously helpful in giving schools some of the fiscal and policy flexibility that seems to underlie creativity.

Norway(1)

In discussions about the ability of educational institutions to function effectively within rapidly changing environments, an important point is the often postulated relationship between decentralisation of decision-making power and the effects this may have on the innovative capacity of the individual school. But while decentralisation (and therefore self-government) may be regarded as a necessary condition for increasing the innovative capacity of the school, it does not lead automatically or necessarily, however, to innovative behaviour. Decentralisation may in fact concentrate power in the hands of groups that are not innovative. Or innovations may be planned and implemented in an authoritarian way. The question of internal democratisation is therefore a very complicated and a critical one. Concentrating on one small part of it, central government subsidies of local government's expenditures on primary schools, can be illustrative of this in two ways. First, these subsidies are connected with one of the most central aims of Norwegian educational policy: the same quality of educational provision in all parts of the country; on the other hand, they are combined with rather strict legal regulations of input factors, a necessary consequence of the way the system is formed - the subsidies being given to local authorities according to their actual expenditures on teacher salaries, and to their fiscal capacity; the proportion of teachers' salaries covered by subsidies varying from 25 per cent to 85 per cent. Thus, the legal instruments play an important role in regulating the number of hours taught in class, extra hours taught, class size, teaching obligations, teachers' qualifications, teachers' salaries, and various other things, and have several other important consequences including the centralisation of decision-making power by establishing an official hierarchy of authority and an official method of dealing with matters. In addition, they are usually less flexible than other instruments. Little room is given to school self-government or local autonomy.

Changes in this system are being considered with an eye to enhancing the possibilities for more local freedom without affecting the degree of equality already reached (or the possibility of even

1) This discussion is based on a paper by Mr. Egil Bakke of the Royal Ministry of Church and Education, Oslo, on "Financial Instruments and Decentralisation of Decision-Making Power".

greater equalisation). This is the central idea behind an alternative system now being worked out in the Ministry's Planning Division. In this system, standard costs per pupil have been introduced as a basis for subsidy after a thorough investigation of the cost structure of the primary schools had been made. Its main benefit is that it combines equality with freedom by the use of the following factors:

- a) Standard costs are calculated on the basis of chosen standard inputs of all major cost factors. Thus one avoids twisting of demand at local level.
- b) Expansion of subsidy base to 100 per cent of the running costs gives an opportunity to compensate more than before for differences in financial capacity.
- c) Standard costs per pupil will make it possible to remove regulations of teacher input as desired.

This system must be differentiated according to variations in the standard costs per pupil. Costs per pupil in the smallest schools are more than twice as high as in the largest schools. Small schools usually have small classes, a low teacher-pupil ratio, and need relatively more teaching hours per pupil. Thus one cost standard for non-graded schools, one for two-graded, and so on up to six-graded schools is used. Differentiation is also made according to fiscal capacity.

The introduction of a system based on standard costs per pupil is expected to improve the possibilities of controlling rising costs as the number of pupils is not a factor which can be very easily manipulated.

As already said, the present subsidy system is based upon a cost factor per teaching hour and, through a rather rigid and bureaucratic system based upon extensive use of legal instruments, the central authorities control in detail the consumption of these teaching hours. The new system in contrast will be based upon a set number of teaching hours, using minimum and/or maximum quotas, and the changes envisaged are clearly geared towards giving local authorities a greater say in their disposition. They would enable the transfer of teaching hours between categories, classes and schools, according to strongly felt local needs, and would remove present restrictions, strongly limiting local discretion in the organisation of the school-day and the instruction process. Pupils could be organised in groups of various sizes on pedagogical grounds.

The concept of the curriculum is also changing. It is no longer to be regarded as a fixed amount of knowledge to be transmitted from teachers to pupils. Curriculum requirements are to be made less compulsory and more flexibility of choice will be allowed. In theory both pupils and teachers shall participate in choosing an appropriate

course of study. Examinations are to be reduced and have been wholly abolished at the lower level. In short, the purpose of these new measures would be to stimulate creative, innovative behaviour at the local level with the idea that all groups, pupils, teachers and parents, will be motivated to participate.

This discussion has focused upon the reforming of the subsidy system for the primary school as a very decisive element in the developments now going on in Norway. The reform has three main features:

- greater emphasis upon financial and informative instruments to replace a reliance on the use of legal instruments;
- decentralisation of decision-making power from central to local level;
- a desire to give pupils, teachers and parents a greater say in the organisation of instruction and learning.

The role of the central authorities in this new system will in principle be three-sided. First, they will continue to lay down the basic principles governing the organisation of instruction in the primary school. Secondly, they will have to provide for and maintain an equitable supply of education for all children. Thirdly, they will regulate relations between local units, mainly to prevent powerful units from dominating weaker ones. In principle, this means that decisions which strongly affect many or all units should be taken by a level above and not through competition or negotiation between the units. This concerns, for example, teachers' wages, teaching obligations and the system of evaluation.

A major problem seems to revolve around the role of the state subsidy in enabling low spending districts to extricate themselves from such a position when the subsidy is based on salaries or operating costs. Such a system is bound to a measure of the status quo, and is thus in some ways unable to recognise a need for a massive subsidy to improve programmes. Also, these costs (e.g. salaries) are not real, in Norway's computations, but are based on a standard national unit, thereby eliminating further local control through the neglect of regional cost differentials. It may be questioned whether "freed-up" decision-making at the local level can move very far without some further accounting for the fiscal context necessary for such a hopefully creative operation. There seems to be an attempt to standardise the system on educationally oriented categories, which is different from the type of fiscal statement used in New Jersey.

Alberta(1)

In Canada, there are basically two approaches to the financing of schools at the provincial level: funding may be conditional or unconditional. The unconditional grant has often been referred to as the "cut-up-the-pie" approach. That is, given some fixed amount of provincial resources, the monies are allocated on some equitable basis, with no restrictions on how these monies are to be spent. On the other hand, a conditional grant usually has two sets of conditions which apply:

1. Those a school system must meet in order to obtain the funds; and
2. Those within which the school system may spend the funds.

The mix between conditional and unconditional funding is, in part, a determinant of the freedom possessed by a school system to adopt, adapt, or reject an innovation. Unconditional funding, normally the largest part of a school system's resources (see Table 1), tends to be neutral with respect to change. With no restrictions on how the money is to be spent, a school or school system may channel the monies into preservation of the status quo, or use it in some change-oriented manner. In other words, if all funding is of the unconditional type, it is ultimately the orientation of the school staff, administration, and public which influences the creativity of the school. If the school is change-oriented, it will be creative. If the school is conservative, it will show little creativity.

The unconditional type of funding has, therefore, no direct effect on the school's decisions regarding change, other than the extent to which it might relate to the general sufficiency of funds. If the dollar amounts (measured in constant dollars) received through unconditional funding remain reasonably constant from year to year, programmes will tend to become set, expenditures fixed, and the local options for positive change will become less apparent; whatever change may be observed here, is probably traceable to schools pre-disposed to change. If, on the other hand, revenues derived from unconditional funding increase at an unexpectedly rapid rate, then the flexibility of all schools - change-oriented or not - to make changes also increases since the uses to which these additional monies may be put will not have yet been defined. A cutback in unconditional revenues, again measured in constant dollar terms, may force a school to be creative if it intends to continue providing the same educational services, or it may cause a cutback of services. Only the former alternative implies creativity. Table 2 summarises the position.

1) This discussion is based on a paper by Messrs. C.A.H. Lomas and W.L. Hill of the Department of Education, Edmonton, on "Alberta Educational Finance and the Change Process".

Conditional grants, on the other hand, are seldom neutral in their effect on the creativity of the school. In the Alberta case, they normally cover expenditures that are over and above the amount required to operate a school with a minimal educational programme and, unlike unconditional grants, they must be consciously sought. One such type of grant is the incentive grant, whereby a change desired at another level of government is made more attractive to individual schools and school jurisdictions by the provision of monies additional to the normal allotment of funds. Where the total amount of resources remains fairly fixed, the adoption of an innovation, which has some finite cost attached to it, requires that the innovation replace some other part of the school programme. On the other hand, a conditional grant generally allows an innovation to be implemented without necessarily changing any other part of the school programme, since these resources are additional.

In short, then, the change process is variously affected by the form of resources made available to a school, and the rate at which those resources increase from year to year. A conditional grant can facilitate school-based innovation, thus starting the change process, or it can fund the implementation and adoption of an externally imposed change, or it may be designed to retard particular kinds of school-induced innovation. Unconditional grants, however, do not by their very nature have any direct impact on change and the change process. While change is probably an increasing function of the year-to-year growth of unconditional grants, whether or not it results, depends in the final analysis upon the degree to which recipient schools and school systems are change-oriented. It should be pointed out that uniform block grants provide equalisation in significant measure only when they are large enough to provide sufficient funds for a basic programme in each district.

Conditional grants are, nevertheless, conducive to change, and more and more provincial monies have been channelled to school boards in Alberta on this basis over the last two years. It is anticipated that they will assume even greater importance in the future funding of education in the province. Indeed, the increasing emphasis given by government to programme grants and incentive funds may spring from a conviction that Alberta schools have been and are less inclined to initiate and to respond to change than is to be desired.

Table 1

THE SCHOOL SYSTEM'S RESOURCES, ALBERTA

S.F.P.F. 77.75%	S.F.P.F. Instruction	61.95%	Unconditional
	S.F.P.F. Transportation	4.19%	Conditional
	S.F.P.F. Grants in Lieu of Transportation	0.24%	Conditional
	S.F.P.F. Administration	2.00%	Unconditional
	S.F.P.F. Debt Retirement	9.03%	Conditional
	S.F.P.F. D.N.D.	0.34%	Unconditional
SCHOOL GRANTS 5.15%	Special Education Teaching Positions	1.24%	Conditional
	Intern Teachers	0.02%	Conditional
	Special Classes	0.24%	Conditional
	Vocational Facilities	0.56%	Conditional
	Extension Program	0.03%	Conditional
	Isolation Bonus	0.05%	Conditional
	Special Grants	0.49%	Conditional
	Capital Grants	0.01%	Conditional
	Reading Materials	0.12%	Unconditional
	Program Accounting & Budgeting	0.13%	Unconditional
	Shared Superintendent	0.01%	Conditional
	Learning Disabilities Fund	0.07%	Conditional
	Elementary Opportunity Fund	0.92%	Conditional
	Early Childhood Services	0.36%	Conditional
	Unemployment Insurance Rebate	0.34%	Unconditional
	Canada Pension Plan Rebate	0.56%	Unconditional
MISC. 3.29%	Supplementary Requisition	12.39%	Unconditional
	Other School Authorities		Unconditional
	Sale of Capital Assets		Conditional
	Rentals		Unconditional
	Dormitories		Unconditional
	Cafeteria		Unconditional
	Other Revenue		Unconditional
	From Parents		Unconditional
	Federal Government		Conditional
	Surplus and Deficit	1.42%	Unconditional
SUMMARY			
Local & Federal		15.68%	
Provincial		82.90	
Surplus		1.42	
		<u>100.00%</u>	
Unconditional		80.65%	
Conditional		19.35	
		<u>100.00%</u>	

Table 2

THE EFFECTS OF CHANGE IN UNCONDITIONAL FUNDING, ALBERTA

	Decrease in financial resources (constant dollars)	No change in financial resources (constant dollars)	Increase in financial resources (constant dollars)
Change-oriented school	Creative change to maintain services at current levels	Some positive change	Much positive change
Non-change oriented school	Reduction in services	No positive change	Some positive change

Ontario(1)

Ontario is in many ways similar to Alberta in its financing of education, although it does not have quite so fully centralised a funding structure.

Over the past few years the Ontario school system, a system educating approximately two million students, has embarked upon a major reorganisation in which decision-making responsibilities have been reallocated with a view to enhancing the educational community's responsiveness to the current needs of both the individual and society. The responsibility for education is shared by the Ministry of Education and the local school jurisdictions. The Ministry of Education provides leadership and financial support, while the responsibility for local policy development and the delivery of programmes of education has been decentralised and delegated to local school jurisdictions.

Within the policies, programmes, and guidelines established by the Ministry, the local school jurisdictions are responsible for developing local policies and programmes which will provide quality education for their students. They are responsible for the curriculum in their schools, for the provision of special services, for the employment of the required resource skills, and for the efficient operation of their school system.

In an attempt to develop an effective integrating mechanism between provincial policy development and local policy development and programme delivery, the Ministry of Education has developed and implemented several programmes, the most notable being:

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- 1) This discussion is based on a paper by Messrs. Ralph Benson, Ron Graham and Don Johnston of the Ministry of Education, Toronto, on "The Allocation of Financial Resources and Public Accountability in Ontario".

- A consolidation of school districts, effective 1st January, 1969, whereby the number of school jurisdictions was reduced from 1,358 in 1968 to 174 in 1974.
- A variable percentage grant plan for education, which incorporated the concepts of local responsibility and equality of educational opportunity.
- An educational resource allocation system task force to address the issue of resource allocation and accountability at the local school system level.

The Variable Percentage Grant Plan

This plan was designed to incorporate the concepts of local responsibility and equality of educational opportunity. It addressed the issue of local responsibility in that it replaced the stimulation grant concept, in which financial support was provided for specific programmes and services, with the block grant concept, whereby financial resources are allocated to local school jurisdictions who establish their own priorities and utilise the financial resources on the basis of their own policies and programme delivery systems.

The variable percentage grant plan achieved a significant degree of equality of education opportunity in that it equalised the financial resources available to all school board jurisdictions. The major shortcoming of the Ontario grant plan was that it did not recognise that additional resources are required by specific school boards in order to accommodate variations in need for education services and/or regional differences in the cost of providing these services. In order to provide additional resources to specific school boards and accommodate variations in need for education services and/or regional differences in the cost of providing these services, Ontario modified its variable percentage grant plan in 1972 and implemented a system which relies on a set of weighting factors. The weighting factors reflect a school board's need for special education, compensatory education, dual-language education, and technical and occupational education; the additional cost experienced when the transiency rate is high; regional differences in the price of goods and services; the additional maintenance required on older school facilities; the cost of maintaining a more experienced and more qualified teaching force; and diseconomies experienced by small boards in both instructional and administrative areas.

The Educational Resources Allocation System

The Ministry of Education, through the variable percentage grant plan, has attempted to equalise the financial resources available to school boards and increase the degree of local autonomy. As a result, school boards have the responsibility of allocating resources

within their respective school systems and are faced with the need to develop the management skills necessary for this.

In allocating resources, school boards generally use some of the following techniques:

- teachers are allocated to schools on a ratio of teachers to students;
- a Principal is entitled to the assistance of a vice-principal if the school is of sufficient size;
- the availability of secretariat assistance is based upon the size of the school;
- caretaking staffs are allocated on the basis of the age, size and community use of the school;
- instructional supplies and equipment are purchased by the school on the basis of a per pupil allotment.

In general, not enough emphasis has been placed on long-range planning, consideration of alternatives, identification of educational priorities, and the continuing evaluation of a school system's endeavours.

To assist school systems in developing these management skills, the Ministry of Education for the Province of Ontario appointed the Educational Resources Allocation Systems (E.R.A.S.) Task Force. Working in co-operation with the local system, the task force, which is accountable to an advisory committee composed of representatives of the Ontario education community, set out to develop a resource allocation system that would emphasise planning for effective decision-making.

The following are some of the conditions found necessary for creative decision-making in education:

- a provincial resource allocation mechanism that provides an appropriate level of financial resources on an equitable basis to local school jurisdictions;
- a provincial resource allocation mechanism that gives local school jurisdictions responsibility with respect to the utilisation of financial resources within the local school system;
- a resource allocation system that stresses long-range planning, consideration of alternatives, identification of educational priorities, and the continuing evaluation of the school system's endeavours;
- an approach to summative evaluation that involves the co-operation of both local and provincial personnel in a system-wide assessment;
- a clarification of the roles of personnel in the education community with respect to the provision of information and involvement in education decisions;

- an examination and statement of educational goals and objectives on the condition that these statements are for use in planning, operating and evaluation activities;
- a financial data system organised in a programme budget format and corresponding directly to educational planning decisions on a multi-year basis.

At times the challenges of accountability and creativity are in conflict with each other; however, the Ontario experience supports the view that the concepts of resource allocation and public accountability can be melded to produce an education environment that is conducive to creative decision-making.

New Jersey in a National Perspective(1)

School finance reform and concomitant pressure for accountability in education have been the major issues in the recent years of the continuing public debate over equalising educational opportunity in the United States. New Jersey is one of the states whose school finance system has been the object of recent legislative and judicial scrutiny regarding these issues. As a case study, New Jersey is particularly interesting in the light of its current effort to respond to its State Supreme Court mandate to develop a new system of financing public elementary and secondary education. On 3rd April, 1973, this Court affirmed a superior court decision in *Robinson v. Cahill* which ruled unconstitutional the State's present school finance system, heavily based on locally-raised property taxes.

The decision in *Robinson v. Cahill* assumed increased importance as it followed, by two weeks, the finding of the United States Supreme Court in *San Antonio Independent School District v. Rodriguez* that education is not a "fundamental right" guaranteed by the United States Constitution. *Rodriguez* represented a major disappointment for those involved in the education equalisation movement, who had based their hopes for school finance reform on the "equal educational opportunity" principle enunciated in the 1954 landmark United States Supreme Court decision in *Brown v. Board of Education of Topeka, Kansas*.

By contrast, the *Rodriguez* decision took the position that "education, perhaps even more than welfare assistance, presents a myriad of intractable economic, social and even philosophical problems .. On even the most basic questions in this area the scholars and educational experts are divided. Indeed, one of the hottest sources of controversy concerns the extent to which there is a demonstrable correlation underlying virtually every legal conclusion drawn by the

1) This discussion is based on a paper by William A. Shine and Susan Kinsey of the New Jersey Department of Education, Trenton, New Jersey, U.S.A. on, "Creativity of the School and School Finance Reform: The New Jersey Experience".

District Court in this case. Related to the questioned relationship between cost and quality is the equally unsettled controversy as to the proper goals of a system of public education."

The Supreme Court decision meant that for the foreseeable future educational reformers must look to state government for any meaningful equalisation effort. One should not, however, overlook the positive uses for creativity that can be made of this decision for, in defining education as a "power reserved to states" under the 10th Amendment of the United States Constitution, the Supreme Court has made decentralisation of educational control a fundamental part of United States organic law.

In order to appreciate the significance of the *Robinson v. Cahill* decision, it is important to review the Court's rationale for striking down the existing school financing system. Essentially, the Court found that, in the century since the State's constitutional guarantees of a "thorough and efficient" public school system, financing of education has become an overwhelmingly local burden, rather than a State responsibility. Although New Jersey ranks third in the United States in the average amount per pupil spent on education, it ranks forty-third in the percentage of state aid provided to support that educational expenditure. With its heavy reliance on the local property tax, this system is subject to the wide disparity among districts' ability and willingness to support public education. Under such a system, the quality of a child's educational programme depends on the property wealth of his school district.

Thus, the Court attacked what had been considered to be an essential element of New Jersey's school aid apportionment - a flat grant payment to all districts regardless of their wealth or need. In each era of New Jersey school finance history, advocates of full equalisation were faced with the reality of the power of dominant economic interests. At first it was the urban areas which bitterly opposed equalisation; in recent years power has shifted to the suburbs with the cities in more serious economic straits than had been the poor country districts of a previous era.

The judicial directive provided an unparalleled opportunity for meaningful review of the State's educational goals. It also presented a serious threat to progress in education if those engaged in this enterprise were unable to come to substantial agreement in describing the elements of a "thorough and efficient" education. For there are many who believe that a state's obligation begins and ends with offering the opportunity to acquire cognitive skills and to learn respect for the culture and traditions of the society. These essentialists have a great advantage in public debate because their programme is easy to understand - albeit difficult to implement in statutes without a sincere concern for individual differences. Nevertheless, in the discussion throughout the State over both the meaning

of "thorough and efficient" and the development of the required plan to meet the constitutional mandate, every major educational issue has been raised and the purpose and content of education as a legitimate governmental enterprise left open to question. By examining the Court's language and the current legislative response, we may analyse the implications for the "creativity of the school" of various school financing alternatives.

Issues in Defining "Thorough and Efficient Education": The "Input", "Output", and "Process" Approaches

How, then, has the State undertaken this mission? In seeking to define "thorough and efficient" as well as to devise a more equitable funding plan, governmental bodies and professional as well as private interest groups have been confronted with several inter-related issues: What should be the proper responsibilities of the State and local authorities in providing a "thorough and efficient" educational system? How should such a system be evaluated? On what basis should funds be apportioned? What will be the impact of these broad educational and financing policy changes on local school educational change? Or, in other words, how should we encourage creativity in the local school while retaining (or instituting) some measure of accountability for the state system? Obviously, these issues are complex and do not exist in a theoretical vacuum; the educational debate also bears political and economic dimensions. For our purposes here, however, we will discuss the New Jersey debate only as it bears on the central issue of how creativity and accountability relate to state and local responsibilities.

In New Jersey as well as in other states struggling with these issues, discussion has focused on three alternative approaches to defining "thorough and efficient" in terms of equalising educational opportunity. As they are commonly categorised, one approach is based on "input", or the equality of resources - school staff, facilities and equipment - of which education consists. A second approach emphasises "output", or a measure of student learning which is directly related to his attendance at school. The third approach is couched in terms of "process", or the delivery system that relates school resources to student learning.

The major thrust of the Court's decision is that equity in financial support of students provides the best index of equalisation of educational opportunity. In making this determination, the Court analysed and rejected the use of measurement of educational outcome as the major basis for its decision; but in finding "dollar input" to be the only available basis for equalising educational opportunity, it did not assume that equal sums of money per pupil would either "assure equality in educational results" or would, in fact, be truly

equitable or desirable. The trial court and subsequently the Supreme Court were heavily influenced in this regard by the work of James Guthrie in "Schools and Inequality". Guthrie concludes that students of low socio-economic status require greater educational support in order to be provided an educational opportunity equal with that of students of higher socio-economic status. Given Guthrie's findings, a case can be made for allotting additional funds to school districts with large numbers of students of low socio-economic status.

If there exists no solid evidence on which to base "output" criteria for equal educational opportunity, and sole reliance on the "input" of money fails to meet the Court's directive to define the "content of the constitutionally-mandated equal educational opportunity", only by using a "process" approach may we respond adequately to this problem. A statement that specifies the desirable relationship between the resources of education ("input") and student performance ("output") provides a sound basis for a definition of "thorough and efficient" education. This relationship is the educational process. To be "thorough and efficient" this process must set forth a succession of educational activities conducted in a definite manner and leading to the accomplishment of stated educational goals.

The major advantage of the process approach is that it values the flexibility and excellence possible through local decision-making regarding educational programming. In addition, it provides for evaluation of educational assumptions by continuously relating resources to student performance. A disadvantage of this approach is the problem of gaining popular support for the evaluation of student performance based on school instruction, apart from human development. For in order to measure the existence and quality of an educational process, that process must include written goals, instructional objectives related to those goals, and a system of continuous, comprehensive and co-operative evaluation to determine the degree to which goals and objectives are being reached. The entire process must then be validated by student performance. This performance, however, must be related to the goals and objectives of the process and not merely reflect students' maturation which is influenced by many variables beyond the process of formal schooling. What can be evaluated is the extent to which the programme planned and carried out is based on educational needs and modified or strengthened relative to meeting those needs.

Here is where the local school community has the opportunity - in fact, the responsibility - to be creative. In determining the goals and needs of the community and its pupils, and in designing an instructional programme appropriate to that unique situation, the local school district makes the fundamental educational decisions. Contrasting with a strict "input" approach (in which the state could

determine the staffing ratio and facility and equipment requirements for each school and provide the funds necessary to obtain those resources) or a strict "output" approach (in which the State could allocate resources on the basis of student achievement measures), the "process" approach assumes that the best educational decisions are made closest to those who will carry them out or be affected by them. A system that supports lay involvement and provides instructional leadership at the school level is necessary for the implementation of a "process" definition of "thorough and efficient". The interdisciplinary nature of student performance evaluation demands that it be an integral part of the educational programme and that the staff and citizens of the local community assume a major role in its conduct. Avoiding the artificial separation of evaluation from goal-setting, needs assessment and programme development, the process approach depends on the school or district to evaluate student needs and performance to determine the adequacy of their plan and goals in meeting those needs.

To accompany this method of educational governance with shared State and local responsibilities, the Joint Legislative Committee proposed a funding plan that would continue to rely on some locally-raised revenues. In order to have not only the statutory responsibility for direct local school management, but also the fiscal ability to make meaningful choices, local districts would share in their schools' financial support. As expressed in its report, the Joint Committee stressed its commitment to "sound local school board management and an interested citizenry actively supporting the public schools" as a vehicle for creativity in education:

The local school districts must have considerable freedom and encouragement to innovate and experiment, to try new approaches and promising programmes for, otherwise, educational practice will stagnate and rigidify. The detailed operation of the public schools is clearly best handled at the local level, which is closest to the people. The Committee feels that widespread civic support, dedicated lay board direction, and sound professional management are essential components of any thorough and efficient system of free public schools ... A move to full State interest could lead to a considerable loss in concern and interest at the local level, both with regard to the financial operation of the schools and to their educational management. Over time, full State funding might also lead to excessive State intervention in local school affairs. Yet, the Committee also realises that a substantial amount of the funds for most local school districts must be raised at the State level. As the Court clearly stated, New Jersey cannot continue to rely largely on local property taxes for the support of its public schools. To do so would

perpetuate the sizable disparities which presently exist in the funding, operation, and performance of the public schools. In addition, as a matter of equity, New Jersey should try to equalise better the tax effort required of the local units in providing sufficient funds to maintain a thorough and efficient system of free public schools. This can only be accomplished through significantly greater State participation in the raising and distribution of school funds.

Because the importance of creativity in educational theory is at times obscure and because there is no statistical proof regarding its worth, creativity becomes a precarious value. When this phenomenon is joined with a requirement to finance a broad-based tax in New Jersey, one can easily see why educational reformers are alarmed. One should not assume that support for education has a guaranteed base; nor should one assume continuous progress. When public reaction against taxation is focused on education as the major state budget requirement, there must be a clear programme presented that can withstand sharp, and, at times, hostile scrutiny. Simplistic promises of accountability in the production model will be a disservice to creativity in education.

Chapter VIII

CONCLUSIONS

The tasks of the education system as defined in the previous chapters of this report obviously require that a substantial number of changes take place if schools are to be transformed into creative institutions. The Project's five study groups, while primarily addressing themselves to what might be termed the internal and external agencies and mechanisms of support, have demonstrated that these changes can take place. The self-actualisation of individuals and groups within the school is an equally if not more important consideration, although it is by no means clear that we have the understanding or the technical capacity to provide adequately for personal growth in and through institutions as numerous, disparate and beset with problems as our schools undoubtedly are. Any assessment of the potential for creativity of the school must concern itself with the means whereby teachers and pupils can achieve greater fulfilment and more adequate growth through their participation in schooling. From this point of view, studies of creativity in the arts, in thinking, in inter-personal relationships, in group activities and so forth are of the utmost importance. One needs to set these studies more firmly within the context of the institutions and situations in which teachers and learners work. Thus it is not creativity in the abstract, or in ideal circumstances, that is relevant, but those conditions and contexts familiar to teachers, e.g. classrooms, workshops, laboratories, staff rooms, halls and field trips. For this reason, it is appropriate to think of the initial training and continuing education of teachers increasingly within the context of the school.

This shared perspective appears to have influenced the steps being taken in Member countries - despite differences in their educational systems - towards the support of the creative school. The preceding chapters have intended to discuss some of the substantive issues facing schools and education decision-makers in relation to the concept of creativity in the school. Looking at the support the schools need to improve their capacity to innovate and solve problems has raised a number of points about the creativity of the educational process itself and the environment in which this process should take place. These points are worth examining separately.

1. THE SCHOOL AS THE CRUCIAL UNIT IN THE INNOVATION PROCESS

This proposition has been the basic assumption of the Creativity of the School Project from the outset and has not been seriously challenged subsequently. To repeat briefly the points made in Chapter I: Creativity and adaptiveness are ultimately qualities of the teacher and innovations are not likely to 'take' unless individuals are committed to their successful implementation. The fact that innovations are often school-wide in their scope and that innovations ostensibly confined to one part of the school often have repercussions throughout the school supports the view that the school is the crucial unit in the change process.

There appears to be an implicit assumption in the papers prepared for this project that there is a degree of integration between the parts of the school which permits one to write of the school as an entity and to assume a degree of integration - though this should not be overemphasised - between such components of the school as its structure, administration, curriculum, pedagogy, and so on.

2. CREATIVITY IS A FUNCTION OF THE PROPERTIES OF THE SCHOOL AS A SOCIAL SYSTEM

If the school is taken as the unit of innovation it follows that its creativity will be a function of its internal organisation and relationships. These internal characteristics will, of course, be shaped by external factors, but the school should have sufficient autonomy to determine its internal activities. Given this degree of autonomy, it follows that how a school determines its own processes will be crucial. This is the major theme of Chapter IV but it is also considered in other chapters. Chapter III, which is specifically concerned with incentives for teachers, locates this discussion within the broader context of the school.

Creativity is likely to be fostered in schools where:

- authority is collegial rather than hierarchical;
- decision-making is participative rather than exclusive;
- communication is open rather than restricted;
- structure is flexible rather than rigid;
- resources are dispersed rather than centrally controlled.

The hypothetical model of the creative school is one in which teachers work together in task-oriented teams with leadership functional or rotating and autonomy over their own resources. In this model teachers would have a broad degree of control over what they teach, at least within the general guidelines of school policy which itself would be decided on a participative basis.

In fact, it is rare to find such schools in any system. While some pioneering schools approximate to the model there is no research evidence that such schools are actually more creative than others. The country studies and experts' reports to the Project have highlighted a number of barriers to the attainment of a creative organisational structure in schools. These include their dependence on their environment, the attitudes and responsibilities of the head teacher and school personnel and the additional time required by teachers to participate in policy-making and planning activities outside of their normal teaching day.

Nevertheless, in spite of the problems there is evidence of a shift towards more flexible and participative patterns of school organisation, partly perhaps as a reflection within the school of outside socio-political trends and partly because of the recognition of a need for a high degree of congruence between school organisation and innovations in curriculum and pedagogy.

3. THE QUALITY OF THE SCHOOL IS DEPENDENT UPON THE PROFESSIONAL QUALITIES OF TEACHERS

It has been argued that creativity in the curriculum and teaching is to some degree a function of the qualities of the school as a social system. If open structures are more conducive to creativity than closed structures, it can only be because this enables teachers to develop and practise their professional skills in a more creative fashion.

In exploring the issue of professionalism it might be useful to draw a distinction between restricted and extended professionalism(1). The former refers to the professionalism exercised in the classroom. It embraces the skilful preparation of teaching materials, an appropriate and effective teaching style, a responsiveness to the needs of the group and of individuals within it, efficient classroom organisation and good class control. The term restricted professionalism is not to be interpreted in a pejorative sense but is used rather to indicate that this highly desirable form of professionalism is confined in its scope to the classroom.

The term extended professionalism is used to indicate that the professional skills of the teacher extend beyond the classroom and involve a broader perspective that links classroom teaching with the goals of the school and the long-term needs of both his pupils and of society. The teacher can acquire these competencies by reference

1) Hoyle, E., 'Professionalism, professionalism and control in teaching', London, Ed. Rev. 3(2).

to personal experience, and to experience as informed by a body of educational theory. Professionalism is also extended in the sense that skills other than classroom skills are entailed. These additional cognitive and inter-personal skills are required because the teacher is becoming increasingly involved in policy-making and planning in the school and perhaps beyond it. Improved cognitive skills involve an understanding of the principles of curriculum design and of the way in which the school functions as a social system to ensure that new curricula and new forms of organisation for instruction can be more effectively implemented.

4. THE CULTURAL CREATIVITY OF THE CURRICULUM

The reform of the school curriculum, which developed within a decade into a world-wide movement, provided an opportunity for establishing a dynamic relationship between school and culture. Essentially, one may conceive of the curriculum as either culturally conserving or as culture creating. The conservative approach is often - but not necessarily - associated with the view that the schools have a clearly defined and limited role including the task of transmitting pre-established values and authorised knowledge. The knowledge component of the conservative curriculum may be kept 'up-to-date' in the sense of being in line with contemporary scholarship but it has no built-in-mechanism for linking it dynamically with the major domains of cultural experience or the basic social institutions and processes. This is the fundamental reason for being sceptical about the whole curriculum development project movement as itself an enduring dynamic for change: its vitality depends not upon an organic relationship between its concerns and the major concerns of contemporary life but upon the constant injection of funds and personnel. Consequently, when funds dry up, or doubts are expressed about the 'effectiveness' of particular projects, the movement for reform of the curriculum may come to a halt.

A different approach to the curriculum is required if it is to maintain its adaptability and its capacity to renew itself. The approach suggested here is to think of it as a vital element in culture. The fact that it is indeed a product of cultural experience - a point also emphasised by the curriculum conservatives - is one aspect of such vitality. The other is that the curriculum does itself play a part in creating culture. One needs to give more attention to the ways in which this happens and to the design of educational experiments intended to extend links between curriculum and culture.

5. CREATIVE PEDAGOGY

The development of curriculum materials designed to stimulate and strengthen interpretative and critical thinking, free association of ideas and their imaginative applications is one basic element within a strategy for creativity of the school. The realisation of the creative potential of learning materials, however, depends upon their effective use in teaching and learning situations. (It depends upon many other considerations as well, but these will not be discussed here). Curriculum development projects, in-service courses, conferences and workshops for teachers and new organisational structures must all have some relevance to the educative relationships between teachers and learners. That is to say, they are not self-justifying but need to be justified through the contributions they make to the fuller development of individuals and groups.

There are many examples of creative pedagogy, some of them comprehensively studied and researched, others still on the fringe of systematic professional concern. The school's potential for creativity has been barely touched upon by many traditional forms of pedagogy: the set assignment plus the pre-packaged text, the routine recitations and examination performances, the tendency to converge upon 'correct' approaches and 'right' answers may be contrasted with the examples of creative pedagogy that have been the distinctive contributions of early childhood and primary schooling. Perhaps the essential features of educators working in these realms are the readiness to innovate and extemporise, the use of a multiplicity of forms of communication and expression, the willingness to adapt learning tasks to the emerging traits of the learners, and the replacement of fixed size, large teaching groups by smaller groups, individual learning situations, and other more flexible forms of organisation.

6. TEACHERS NEED INCENTIVES IN DEVELOPING THEIR PROFESSIONALITY

If teachers are to be expected to demonstrate these features, there clearly needs to be a system of incentives in order to encourage them to develop the necessary skills. This has been extensively discussed in Chapter IV, but it is useful at this point to recapitulate some of the fundamental issues involved in incentive systems.

In discussions about job satisfaction it is customary to distinguish between those satisfactions (or dissatisfactions) that derive from the job itself and those derived from rewards that are extraneous to the actual job - remuneration, status, power, etc. It is perhaps useful to apply this distinction to incentives. If one does so, then the crucial question becomes that of whether extrinsic incentives

are required in order to stimulate teachers to acquire the knowledge and skills required by an extended professional. There is no unequivocal answer to this question which, in fact, is a fundamental one for society as a whole when put in the context of social stratification, e.g. do people require differential rewards in terms of money, power, status, etc. in order to encourage them to convert their talents into the skills that society is said to need?

Professional people are concerned with both intrinsic and extrinsic rewards. Their work is generally absorbing for them and they derive intrinsic satisfaction from it. On the other hand, they are also concerned with the extrinsic rewards they feel to be their due. Broadly speaking, their satisfactions tend to be associated with the intrinsic nature of the job whereas their dissatisfactions tend to be associated with their extrinsic factors - power, status, etc. The problem for the teaching profession is that in most systems it tends to be - to a greater or lesser degree - stratified with higher rewards going to the higher strata and the highest rewards going to those who leave the classroom.

If a school that permits and encourages non-hierarchical, flexible, and collaborative relationships is likely to be more creative than traditional institutions, clearly the question of financial incentives cannot be ignored. The problem as discussed in Chapter III suggests that an appropriate strategy is one that balances a competitive entering salary with reasonable long-term promotion prospects whilst at the same time allowing scope for merit awards as incentives for creative innovation in the school. The problem of who should determine these merit awards - the head teacher plus senior staff or the relevant inspectors - is also an element to be considered. There are clearly advantages and disadvantages with both methods, and a system of joint decision-making is advocated. There are also other possibilities such as a collaborative school environment with a system of evaluation by professional peers. This has its own problems and evidence suggests that it would not be popular with teachers - at least given the nature of educational systems at present. Another alternative might be to allocate merit awards to schools rather than to individual teachers on the basis of outside evaluation by, say, inspectors. This, too, would not be easy and is likely to encounter opposition from teachers' unions - although it is not inconceivable that unions and professional associations of other kinds might have a role to play. A further important point made in the chapter is that one incentive for teachers might be to provide them with support services that would relieve them of their more routine duties. This support might include paraprofessional reprographic and secretarial assistance and perhaps the use of non-professional volunteers helping with various school activities. This development generally lacks the

support of teachers' unions who express a concern that resources may be switched away from teachers' salaries in times of restricted budget conditions. The argument is often put forward that the involvement of paraprofessionals could undermine the professional status of qualified teachers.

Although the salary issue is an important one, perhaps one could envisage a rather wider set of possibilities in developing intrinsic incentives that would provide opportunities for the professionally-oriented teacher.

7. IN ORDER TO BE INNOVATIVE THE SCHOOL NEEDS ADEQUATE RESOURCES AND CONTROL OVER THEIR USE

In stating that the school should have "adequate" resources if it is to be creative, the first question to be asked is "what is meant by adequate?". Clearly no specific or generalisable answer can be given. The only principle that can be adduced is that it is likely that creativity within an organisation will occur when there are uncommitted resources over and above basic operational costs. But, as pointed out in Chapter VII which deals with the question of finance in detail, it is not clear which form of resource production (local taxation, national taxation, parental fees, voucher system, etc.) is most likely to lead to additional funds being allocated to support innovation activities. It is perhaps unlikely in cases where revenue is produced at the local, regional or national levels that a lump sum would be allocated for the specific purpose of initiating unspecified innovations. What might occur would be a situation in which a surplus will be generated at an administrative level above the schools which schools would be entitled to bid for in support of a new programme or project. For a school to generate finance for innovation it should have a substantial degree of freedom to decide upon the use of its allocated resources.

The degree to which a school will have such control, and the extent to which this control is used to enhance its creativity, must remain an open question until the necessary comparative studies have been made. In theory, schools that are financed by fees will have a greater opportunity to utilise part of this income to support innovation. But whether, in fact, it does so will be dependent upon a number of factors. One would be the form of control over expenditure. If this rested largely with a governing body, this body might be more concerned with minimising fees than with experimental innovation. Much would clearly depend upon the attractiveness of the proposed innovation or upon the degree of discretion allowed to the headmaster.

In schools that are publicly financed the degree of increment permitted is a crucial question. Generally speaking the provision

and maintenance of the physical plant is not under the control of the school. Similarly, the basic cost of teachers' salaries is not usually a matter for the school except in two instances. Perhaps the most common of these is the allocation of differentials between members of staff. As noted in the preceding section, this can be a device for generating creativity by rewarding those teachers who make the greatest contribution. But it is also noted in Chapter III that as the school has ongoing administrative tasks to fulfil, there are perhaps pressures on the headmaster or principal to allocate the allowances to those who fulfil these tasks. One does not know what the effects are of collegial decision-making on the allocation of resources in encouraging creativity at the school level. In the second instance, where the school has a degree of control over its resource mix so that it has at least a degree of flexibility to choose between allocating resources for the salaries of professionals or support staff, or in utilising resources of other kinds, school level creativity will be encouraged. There are inevitable limitations here due to external controls, including the power of the unions to limit the degree to which staffing ratios can be manipulated. Staffing flexibility is a fundamental resource in supporting innovation since the better the staff-student ratio the greater the degree of flexibility possible within the system. Linked to this is the amount of time that can be made available to teachers for the necessary planning and preparation that innovation involves.

Time is at a premium in all schools and it is likely that with more of it available for experimentation, and a greater degree of control within the school over its staff resources, the greater the potential for creativity. Perhaps one of the major ways schools can support creativity is in negotiating for additional staff, within prescribed limits, on the basis of specific proposals. Obviously, much depends here on the degree to which the administrators or politicians who control these resources are willing to support innovation in this way.

Resources other than those of staff are perhaps less fundamental to creative schools but they are by no means negligible. One has in mind here the cost of materials, equipment, travel and so forth. The obvious point about this is that if the school is to be encouraged in its creative efforts, it should be given considerable latitude in the use of these resources. When this occurs, the issue becomes one of decision-making within the school. From what has been said in previous sections creativity is likely to be enhanced where allocations of internal funds is a matter of open debate, to the degree compatible with legal responsibility and collegial participation. The creative, imaginative use of resources within the school is of particular importance in periods of budgetary constraint, when the flow of additional funds for innovative activities often comes to a standstill.

8. THE SCHOOL NEEDS THE SUPPORT OF EXTERNAL AGENCIES IN THE FORMULATION AND IMPLEMENTATION OF ITS INNOVATIVE ACTIVITIES

While the school has come to be regarded as the key unit in the creation or adoption of innovation, it clearly needs external support if it is to function in this role. The support envisaged here is not the supply of funds, but the supply of expertise. Innovation is not easy. It requires time and it requires various kinds of knowledge and skill. Some of this may be present in the school in different amounts or it may be potentially present but in need of development. Three categories of relevant expertise can be identified: Curriculum knowledge, which includes a knowledge of the theory, pedagogy, and skills of curriculum design and the preparation of teaching materials; Organisational knowledge, which includes a knowledge of organisation theories as applied to schools (including problems of organisation for teaching and learning and of administration and decision-making processes) and the skills involved in organisational development; thirdly, Research knowledge, including an awareness of existing research on particular issues.

The school may need to call on the expertise of people with these skills who might be located, for example, in curriculum development agencies, teachers' centres or professional centres, universities, colleges or research institutes. They would also include national and local inspectors and advisers. In most Member countries the inspectorate is moving away from a supervisory or evaluation role to a broader one of school support. It is the task of external specialists not only to apply their skills to the school situation but, more importantly, to develop these skills amongst the teaching staff so that they will become more autonomous. An axiom of this approach is that the external specialist should work in the service of the school in a way that is non-directive. Schools that are able to use external expertise in this way are likely to be creative already; it will take effort to encourage participation of more traditional institutions. One of the signs of a creative school is the confidence it shows in using consultants rather than being used by them.

All support for the school need not necessarily be given within the school itself. In fact, it is an established practice for teachers to go outside the school to extend their professional competence by attending courses and conferences organised by the traditional in-service agencies - colleges, universities, local authorities or school districts and, more recently, by the professional support centres.

Teachers should be encouraged, both within and outside the school to take more responsibility for their own professional development, rather than being the passive recipients of activities arranged to this end by the providing bodies.

9. THE CREATIVE SCHOOL SHOULD BE A BASE FOR PROFESSIONAL DEVELOPMENT

In the past, in-service training largely took the form of teachers attending courses on an individual basis to acquire new competencies in their own teaching area or further academic qualifications. This procedure is now being transformed by a broader concept of staff development. In-service training should certainly continue to include the acquisition of higher degrees and diplomas, which improve professional knowledge as well as enhancing chances of promotion, but it should also embrace attendance at shorter courses or at PSCs concerned with specific skills and competencies. Such activities as participation in seminars, membership in working parties, collaboration with consultants and advisers in the school itself are also stimulants to innovative behaviour. As the links between professional development, curriculum development and organisational development become somewhat blurred, it follows that in-service or professional training activities will become more school-centred. While the individual teacher would remain free to pursue in-service activities linked to his own needs and career, he could also become more involved in in-service activities that are directly related to a particular innovation being developed within the school or committed to the solution of on-going problems faced by the school.

Some unresolved issues

It would be less than frank, however, if the reported conclusions of this three-year Project stopped short of reference to issues that remain unresolved. The following three, in particular, are still outstanding.

The potential dysfunctions of collegiality

It has been generally accepted by participants in the Project that innovativeness is fostered in settings where teachers are most closely involved in the decision-making process, and this principle has, therefore, been adopted in the present report. But, as already indicated briefly, one or two caveats need to be entered. So long as legal responsibility is vested in the headmaster there are likely to remain limits to the degree of participation teachers can enjoy. They may have considerable freedom to make their collective decisions about curriculum matters, but this will always be subject to the veto of the head teacher who alone has this power. This may, in fact, be less of a problem if it is overt rather than covert. It is perhaps important to set clear boundaries marking the degrees of freedom the staff may enjoy rather than to leave these blurred. Creativity, one can assume, is a function of the morale of the staff and it is likely that this

is enhanced when the teachers know where they stand. It is likely to be diminished when a head teacher, under the pressure of current trends towards the democratisation of schools, concedes a pseudo-democracy whereby he indulges in a variety of subterfuges to gain his own way while apparently allowing teachers to make decisions.

Another problem of collegiality is that it can, paradoxically, generate its own bureaucratic structure of committees which can become routinised and uncreative and could, indeed, develop into a set of self-cancelling veto groups more concerned with blocking the creative efforts of some teachers than with furthering innovation.

Little has been said so far about the extension of participation in decision-making to students, parents and members of the community. This can generate creativity but it is again not without its problems. These can arise both if the participation is genuine (because this can appear to teachers to be a threat to their professional standing) and if there are no clear boundaries set (which might well lead to frustration).

The long-term solution for all this is doubtless for the teacher to acquire different sorts of professional skill, and the head teacher appropriate leadership skills - so long as he has a leadership role to play. Meanwhile one must remain aware of difficulties likely to arise in the short-term.

The autonomy of the teacher

In the literature on the creative school, there is a degree of ambivalence as to the autonomy of the teacher. It is often applauded as a necessary precondition of creativity, but the autonomy of the individual teacher is, in fact, under pressure in current developments. It is obviously important that the teacher should enjoy freedom from close supervision if he is to be encouraged to be creative. On the other hand, the creativity of the school as an organisation assumes a degree of collaboration that to some extent reduces the individual autonomy of the teacher. Since the evidence on teacher satisfaction indicates that teachers value their autonomy very highly, there is the danger of a loss of satisfaction which needs careful consideration.

The problem of accountability

At the present time in most systems accountability is hierarchical. The teacher is accountable to the Head, the Head to some lay group via a board of governors or to a professional group via inspectors or administrators. But the theory of the creative school argues for a high degree of school autonomy, an advisory role for the inspector and a freedom of the teacher from close hierarchical supervision. We would thus seem to have a conflict between accountability and

autonomy. Chapter VI outlines different forms of accountability that are more directly linked to client needs - through the voucher system, for example. The more direct involvement of parents in the government of the school is sometimes held to meet both the demands of accountability and to contribute to the creativity of the school. This assumes that the influence of parents is likely to be in a progressive direction and this has yet to be demonstrated. For the present, therefore, the accountability/autonomy issue must be held to be unresolved.

Appendix I

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Appendix II

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